

**Back Pain Report**

**Dartford, Gravesham & Swanley**

June 2016



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**BetterKnowledgeBetterCareBetterOutcomes**

## NEQOS Back Pain Report

This back pain report contains health intelligence produced by NEQOS to support the implementation of the national pathfinder project to provide better pathways of care for people with low back and radicular pain. The NHS England Pathfinder Projects were established to address high value care pathways which cross commissioning and health care boundaries. Many conditions require a pathway of care which moves from the general practitioner through primary care and community services and into secondary care and sometimes specialised services. Difficulties in commissioning across boundaries, however, can cause artificial interruptions in what should be a seamless care pathway. The Pathfinder Projects are designed for all Stakeholders to work collaboratively to examine in depth these health care interfaces and to develop commissioning structures to commission care across the whole pathway. The Trauma Programme of Care Board selected low back pain and radicular pain as the Pathfinder Project as this is a high value care pathway in view of the very large number of patients involved.

The future of the pathway is that it is designed to be run in primary care (general practice and community physiotherapy) and referral into secondary specialist care is only at the end of the pathway. Key to the success of the pathway are the Triage and Treat practitioners; the highly trained practitioners, either extended scope physiotherapists or nurse specialists who essentially run the pathway and have access to bookable slots for the core therapies, nerve root blocks, spinal surgical clinic appointments or pain clinic appointments. This reduces very significantly the delays in the previous system and also reduces the “pinball” management that is a feature of so many health care systems. Quality care is less expensive by reducing ineffective or repetitive treatment and by reducing conversion into chronic disability

In this profile, the current utilisation of secondary care services for back and radicular pain are shown by CCG and providers, including both NHS Trusts and Independent Sector providers to demonstrate variation in activity regionally and across England. This report is based on the population of patients under the care of CCGs in the Kent & Medway Region and provides important information about patient flows from these CCGs across all providers within this region.

Information on hospital admissions is presented by admission method (elective vs. emergency) and type of procedure (surgery, injections, pain management etc.) undertaken. The aim of this report is to assist both clinicians and commissioners in comparing treatment activity rates between regional providers and against national data to reduce variation and develop evidence based care pathways to improve patient outcomes.

Ongoing monitoring of this secondary care activity will evidence where changes implemented through the national pathfinder project for acute low back and radicular pain to provide timely access to evidence based treatments can improve the quality of patient care, provide community based alternatives to secondary care admissions for back pain and reduce secondary care expenditure.

It is important to note that this report is based on the cohort of patients with back and/or radicular pain but does not include patients who have back pain due to specific diagnosis such as cancer, infection, spinal trauma, inflammatory arthritis, cauda equine syndrome as these patients have very different treatment pathways of care.

## Acknowledgements

This work has been funded through the Getting It Right First Time (GIRFT) project that is part of the Department of Health funded Clinically-Led Quality and Efficiency Programme.

Acknowledgements to the Health & Social Care Information Centre (HSCIC) as the source of data used in this report and to Professor Greenough and Mr Ashley Cole for their expert clinical guidance and advice.

## Introduction and background

Low back pain is extremely common and is the largest single cause of loss of disability adjusted life years, and the largest single cause of years lived with disability in England (Global Burden of Disease, 2013). In terms of disability adjusted life years lost per 100,000, low back pain is responsible for 2,313. By contrast the remainder of musculo-skeletal complaints counts for 911, depression 704 and diabetes 337. It should be borne in mind that this is principally occurring in people of working age, or with families. UK specific data shows that LBP was top cause of years lived with disability in both 1990 and 2010 – with a 12% increase over this time. Back pain accounts for 11% of the entire disability burden from all diseases in the UK; furthermore the burden is increasing both absolutely (3.7% increase) and proportionally (7% to 8.5%).

NEQOS have produced CCG and hospital Trust level activity profiles to understand the current position in terms of secondary care activity for back and radicular pain and have worked with a range of key stakeholders from both provider and commissioner organisations to develop the profiles to ensure that the indicators shown are appropriate and relevant to the project. This information needs to be viewed in conjunction with data soon to become available from Arthritis Research UK about the prevalence of back pain and associated risk factors and where possible with locally available data from general practice, including prescribing rates, and onward referrals from primary care (e.g. physiotherapy and radiology).

### *Technical specification*

Following a data discovery exercise supported by Professor Charles Greenough (National Clinical Director for Spinal Disorders, South Tees NHS Foundation Trust), definitions for low back and radicular pain were developed based on a combination of diagnosis codes (ICD-10) and relevant secondary care procedures were identified using OPCS 4.7 codes. These codes have been supported by Mr Ashley Cole, Chair of Specialised Spinal Surgery Clinical Reference Group (Consultant Orthopaedic Surgeon, Northern General Hospital and Sheffield Children's Hospital).

## Data definitions

Data Source: Hospital Episode Statistics (Health & Social Care Information Centre via HDIS). Please note that 2014/15 data is currently classed as provisional.

CCG populations: Health & Social Care Information Centre (Ages 15 & over as at April 2015) (Data was provided in 5 year ages bands, therefore we were unable to use exact figures for Ages 16 & over)

A summary of the data definitions used is shown below:

- Time period: April 2011 - March 2015
- Primary diagnosis = back pain (specific ICD10 codes)
- Limited to episode 1
- Age 16 years and over
- Private patients are included unless specified
- Admission costs are based on the national tariff
- Directly Age & Sex Standardised Rates use the European Standard Populations

The NHS Trusts included for the Kent & Medway Region are:

- Guy's & St Thomas' NHS Foundation Trust
- King's College Hospital NHS Foundation Trust
- Dartford & Gravesham NHS Trust
- Medway NHS Foundation Trust
- Maidstone & Tunbridge Wells NHS Trust
- East Kent Hospitals University NHS Foundation Trust

The Independent Sector Providers included for the Kent & Medway Region are:

- The Spencer Wing (Ramsgate Road)
- BMI - The Chaucer Hospital
- Spire St Saviours Hospital
- The Horder Centre - St Johns Road

## Clinical Commissioning Group (CCG) activity summary

### 1. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015), summary

#### a. Hospital admissions at national level, indicating back pain type and admission method

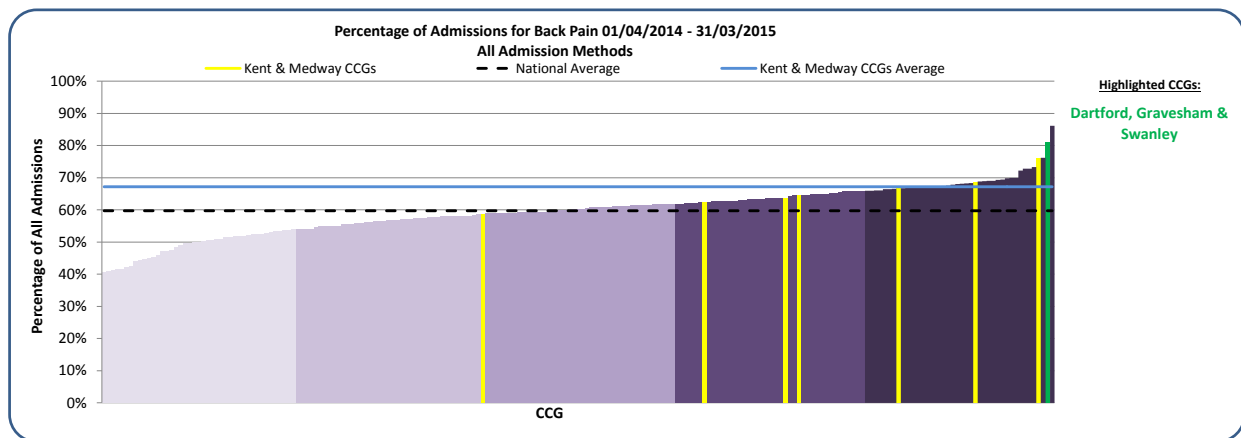
England	Back	Radicular	Total	% Back	% Radicular
Elective	134,448	102,808	237,256	56.7%	43.3%
Emergency	39,331	14,309	53,640	73.3%	26.7%
Other	771	951	1,722	44.8%	55.2%
<b>Total</b>	<b>174,550</b>	<b>118,068</b>	<b>292,618</b>	<b>59.7%</b>	<b>40.3%</b>

Kent & Medway CCGs	Back	Radicular	Total	% Back	% Radicular
Elective	6,902	3,600	10,502	65.7%	34.3%
Emergency	1,363	413	1,776	76.7%	23.3%
Other	20	32	52	38.5%	61.5%
<b>Total</b>	<b>8,285</b>	<b>4,045</b>	<b>12,330</b>	<b>67.2%</b>	<b>32.8%</b>

#### b. Hospital admissions at CCG level, indicating proportion of admissions for back pain

Table indicates the proportion of admissions for back pain only (and not radicular pain)

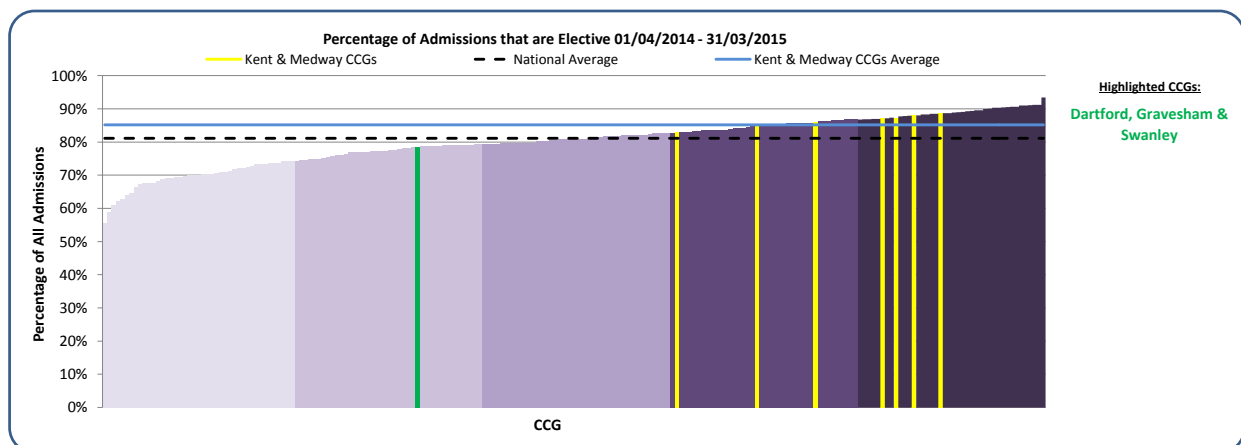
West Kent	58.7%	South Kent Coast	66.5%
Ashford	62.2%	Canterbury & Coastal	68.5%
Swale	63.7%	Thanet	75.9%
Medway	64.4%	Dartford, Gravesham & Swanley	81.1%
<b>Kent &amp; Medway CCGs</b>	<b>67.2%</b>	<b>England</b>	<b>59.8%</b>



#### c. Hospital admissions at CCG level, by admission method

Table indicates the proportion of admissions for back and radicular pain that is recorded as elective

Dartford, Gravesham & Swanley	78.5%	Swale	87.1%
Canterbury & Coastal	83.0%	Thanet	87.3%
West Kent	84.8%	South Kent Coast	88.0%
Ashford	85.9%	Medway	88.6%
<b>Kent &amp; Medway CCGs</b>	<b>85.2%</b>	<b>England</b>	<b>81.1%</b>



#### What is the data telling us?

In the 2014/15 financial year period there were almost 300,000 admissions for back and radicular pain in England, with 12,330 (4.2%) of these for patients registered within the Kent & Medway CCGs.

At a national level the proportional split for hospital admissions is 60% for back pain and 40% for radicular pain, and at CCG level in Kent & Medway the proportion of admissions for back pain ranges from 59% to 81%.

Nationally, approximately 81% of back and radicular pain admissions are elective, with Kent & Medway having a higher proportion (85%). At a CCG level in Kent & Medway, the proportion of elective admissions for these populations ranges from 78.5% in Dartford, Gravesham & Swanley CCG to 88.6% in Medway CCG.

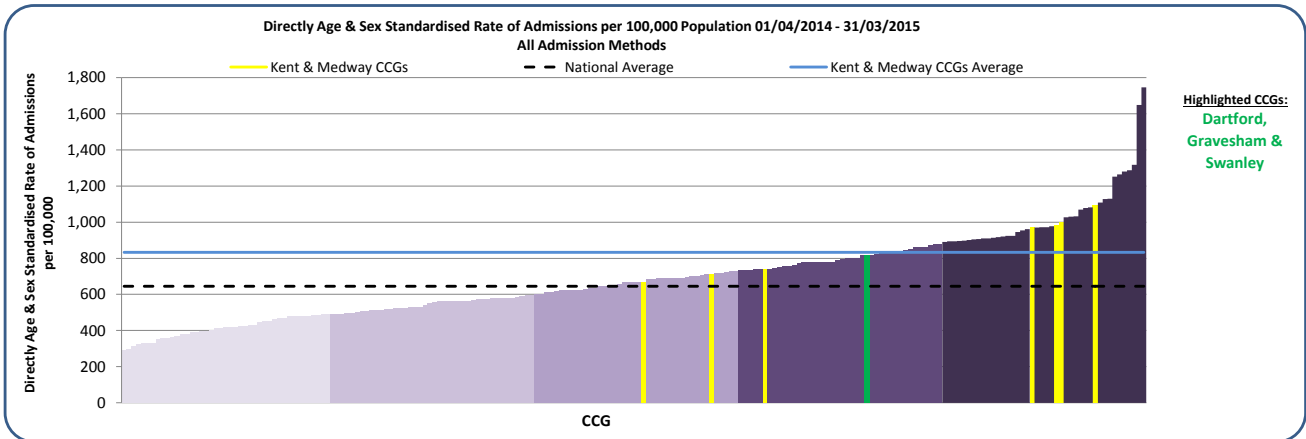
## Clinical Commissioning Group (CCG) activity

### 2. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

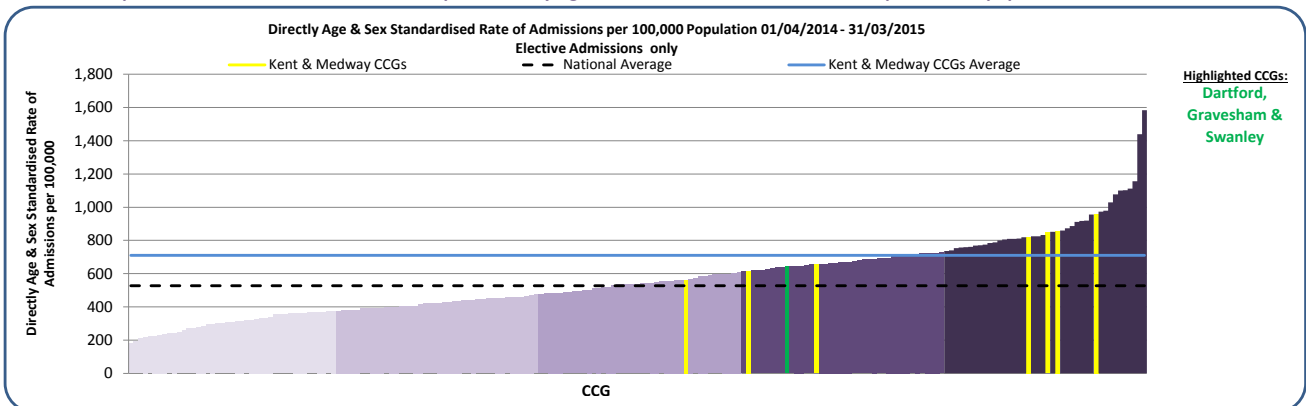
#### a. Hospital admissions for back pain by CCG (all admission methods), Directly Age & Sex Standardised Admission rate per 100,000 population

CCG name	All	Elective	Emergency	CCG name	All	Elective	Emergency
South Kent Coast	1094.3	958.4	133.6	Dartford, Gravesham & Swanley	814.7	643.0	164.7
Ashford	1000.6	856.4	142.5	Medway	738.0	656.0	81.6
Canterbury & Coastal Thanet	981.1	819.8	160.2	Swale	710.5	614.0	87.9
	969.6	848.1	119.8	West Kent	664.2	563.7	95.5
Kent & Medway CCGs	833.5	710.5	119.5	England	645.6	526.5	115.4

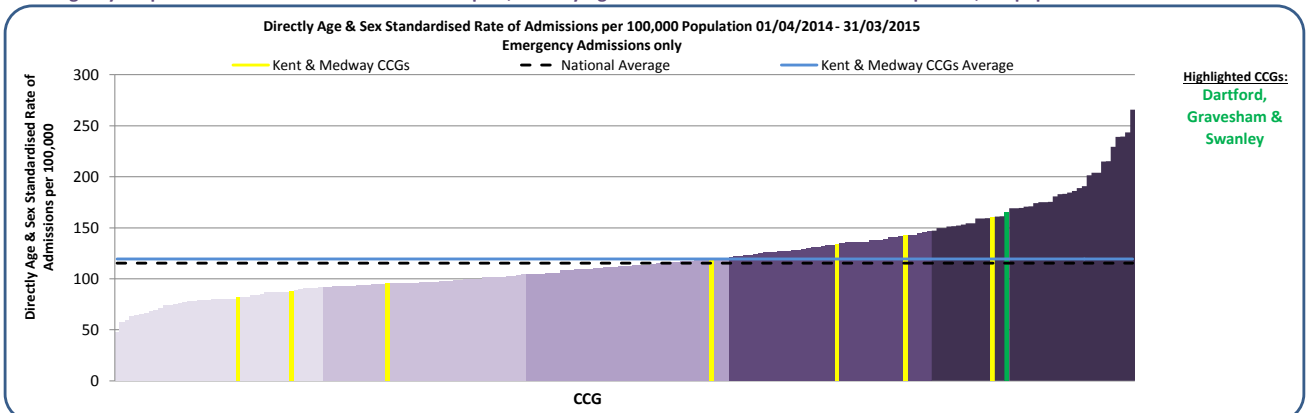
#### b. Hospital admissions for back and radicular pain (all admission methods), Directly Age & Sex Standardised Admission rate per 100,000 population



#### c. Elective hospital admissions for back and radicular pain, Directly Age & Sex Standardised Admission rate per 100,000 population



#### d. Emergency hospital admissions for back and radicular pain, Directly Age & Sex Standardised Admission rate per 100,000 population



#### What is the data telling us?

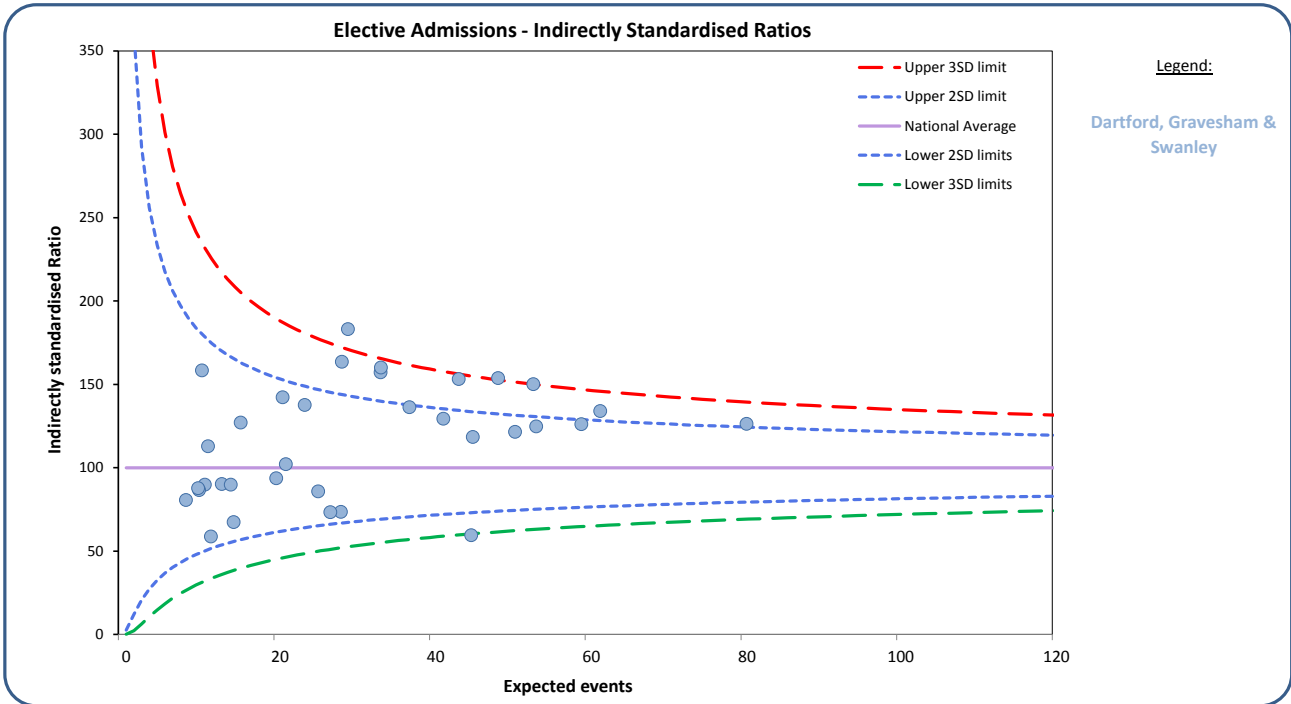
There is some variation in elective admission rates across the CCGs within Kent and Medway with over a 1.7-fold difference between the regional lowest (West Kent CCG) and the highest CCG for the region (South Kent Coast CCG), but all CCGs are higher than the national average. In contrast, for emergency admissions there is wide variation across the CCGs in the region, with two CCGs in the lowest quintile (Medway CCG and Swale CCG) and two CCGs in the highest quintile nationally (Dartford, Gravesham & Swanley CCG and Canterbury & Coastal CCG).

## Clinical Commissioning Group (CCG) activity - GP practice level

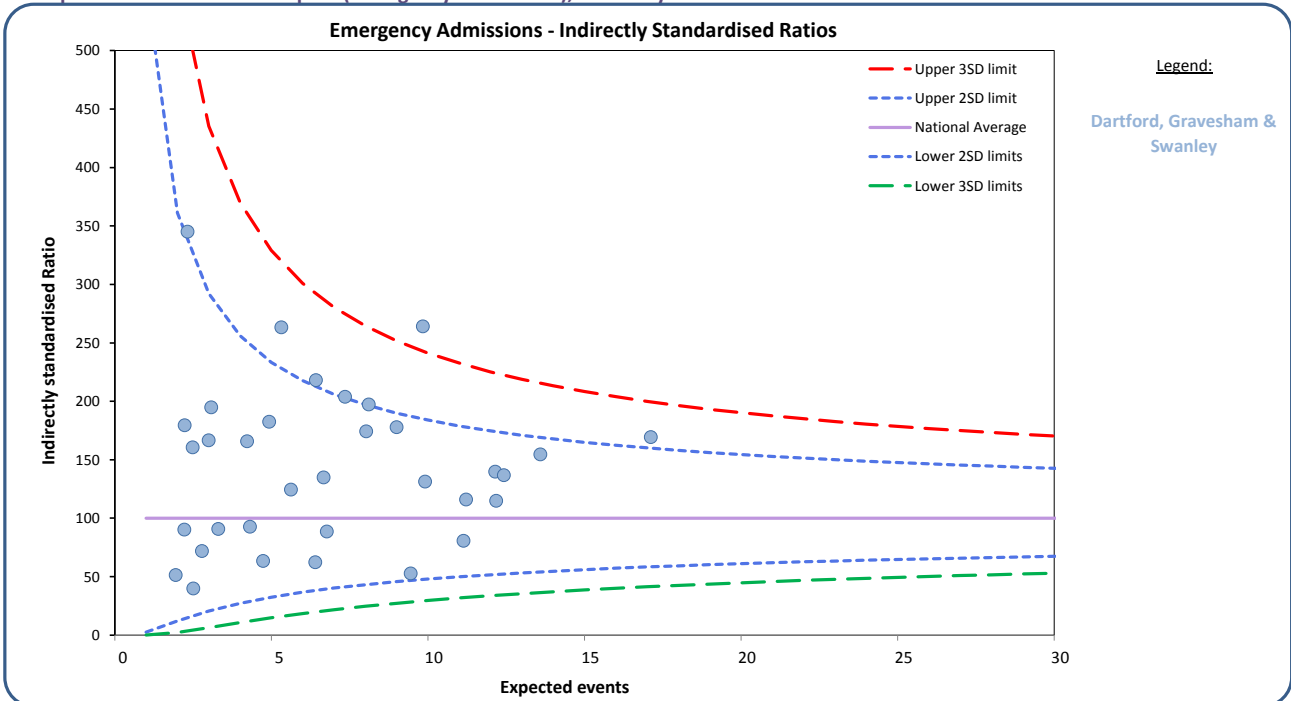
### 3. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

Each symbol represents one GP practice

#### a. Hospital admissions for back pain (Elective admissions), Indirectly Standardised Ratio Dartford, Gravesham & Swanley



#### b. Hospital admissions for back pain (Emergency admissions), Indirectly Standardised Ratio



#### What is the data telling us?

The admission rates for elective and emergency admissions for each GP practice within the CCG are expressed as Indirectly Standardised Ratios with 100 representing the national average. This adjustment has been made due to small numbers and in order that comparisons can be made between practices.

The upper and lower confidence limits on the funnel charts above are based on national data. Each circle represents the constituent GP Practices for the selected CCG(s). All GP practices within the funnel have admission rates that are not significantly different that the national rates with those above the upper blue funnel having significantly higher rates than the national average.



#### 4. Indirectly Standardised Ratios for Elective & Emergency Admissions for Back & Radicular Pain, by GP Practice Dartford, Gravesham & Swanley

Indirectly Standardised Ratios that are coloured Red are higher than 3 standard deviations from the mean. Those coloured Yellow are between 2 and 3 higher standard deviations from the mean.

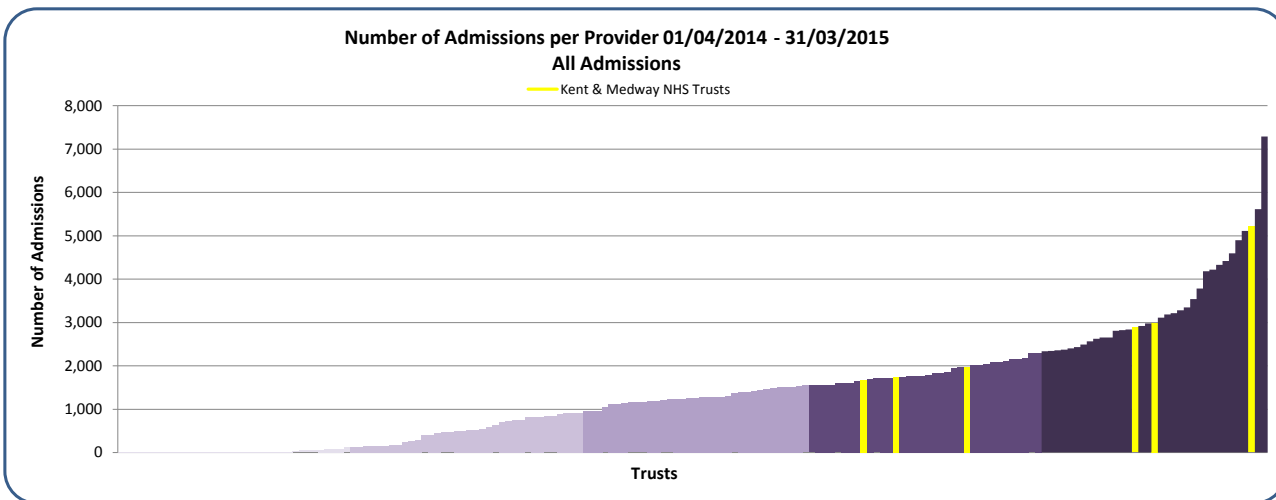
Practice Code	Practice Name	CCG	Population 15+	Elective			Emergency		
				Observed	Expected	Ratio	Observed	Expected	Ratio
G82006	Dartford East Health Centre	09J	11,530	80	53.30	150.08	14	12.18	114.98
G82021	The Shrubbery Surgery	09J	11,905	83	61.92	134.03	21	13.59	154.50
G82028	The Cedars Surgery	09J	7,781	54	41.74	129.36	16	9.00	177.85
G82032	Pelham Medical Practice	09J	10,940	67	53.69	124.78	17	12.15	139.91
G82044	The Gateway Medical Practice	09J	5,793	47	28.73	163.58	<6	6.40	62.45
G82048	Horsman's Place Surgery	09J	8,673	67	43.76	153.13	26	9.84	264.23
G82056	The Orchard Practice	09J	6,522	53	33.70	157.29	15	7.36	203.94
G82062	Parrock Street Surgery	09J	2,222	10	11.12	89.94	<6	2.51	39.85
G82067	Old Road West Surgery	09J	9,735	62	50.99	121.58	13	11.22	115.88
G82073	Meopham Medical Centre	09J	8,172	27	45.35	59.54	<6	9.45	52.89
G82088	Devon Road Surgery	09J	5,436	21	28.59	73.46	14	6.42	218.10
G82096	The Forge Surgery	09J	2,629	12	13.30	90.21	<6	3.00	166.73
G82097	Jubilee Medical Centre	09J	14,590	102	80.72	126.36	29	17.12	169.37
G82122	Swanscombe Health Centre	09J	10,423	75	48.79	153.73	9	11.14	80.81
G82124	West Kingsdown Medical Centre	09J	3,549	30	21.09	142.22	<6	4.31	92.77
G82143	Lowfield Medical Centre	09J	4,775	33	23.97	137.67	14	5.32	263.20
G82156	Ivy Bower Surgery	09J	2,092	9	10.39	86.60	<6	2.23	179.46
G82185	Dartford West Health Centre	09J	7,228	51	37.42	136.31	14	8.03	174.27
G82197	Lamorna Surgery	09J	2,178	13	11.52	112.88	<6	2.49	160.75
G82206	Joydens Wood Medical Centre	09J	1,916	9	10.26	87.72	<6	2.22	90.14
G82212	Pilgrims Way Surgery	09J	4,853	22	21.53	102.18	9	4.93	182.55
G82218	Braeside Surgery	09J	4,838	20	27.23	73.44	7	5.63	124.43
G82221	Horns Cross Surgery	09J	4,613	19	20.27	93.73	<6	4.74	63.35
G82225	The Oaks Partnership	09J	8,741	54	45.55	118.55	13	9.91	131.21
G82639	Maple Practice	09J	2,999	13	14.46	89.88	<6	3.30	90.89
G82647	Temple Hill Surgery	09J	3,949	20	15.73	127.18	7	4.22	165.89
G82648	Rochester Road Surgery	09J	2,567	7	11.90	58.81	<6	2.79	71.81
G82690	Lower Higham Road Surgery	09J	2,190	17	10.73	158.38	8	2.32	345.18
G82710	Bennett Way Surgery	09J	1,830	7	8.69	80.59	<6	1.94	51.43
G82722	Hextable Surgery	09J	2,948	10	14.83	67.43	6	3.08	194.86
G82780	Gravesend Medical Centre	09J	8,135	54	33.74	160.05	16	8.11	197.31
G82808	Oakfield Health Centre, Practice 2	09J	6,271	54	29.50	183.06	6	6.77	88.68
G82809	Downs Way Medical Practice	09J	10,490	75	59.48	126.09	17	12.43	136.78
Y02826	White Horse Surgery	09J	7,036	22	25.66	85.73	9	6.67	135.02

## Hospital Trust activity

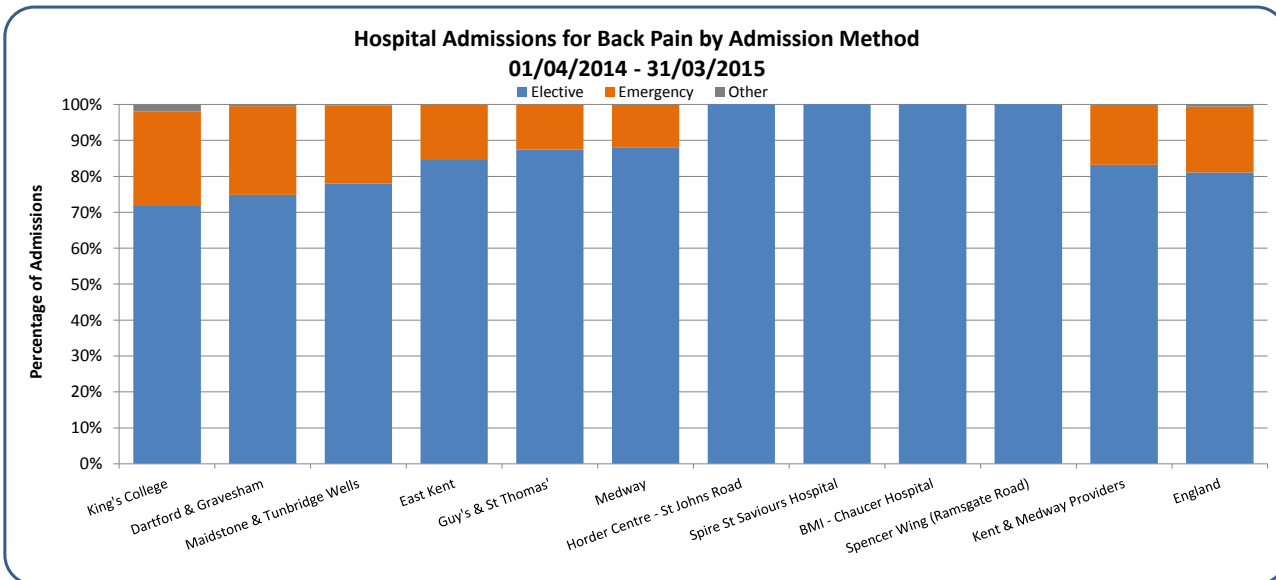
### 5. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

#### a. Number of hospital admissions for back pain (all admission methods, NHS Trusts only)

East Kent	5,214	Medway	1,978
Guy's & St Thomas'	2,986	Maidstone & Tunbridge Wells	1,738
King's College	2,883	Dartford & Gravesham	1,683
<b>Kent &amp; Medway NHS Trusts</b>	<b>16,482</b>	<b>England</b>	<b>251,444</b>



#### b. Number of admissions per hospital Trust, by admission method (Kent & Medway Providers only)



#### What is the data telling us?

The total number of admissions for back pain, rather than a rate, is presented due to the absence of a relevant denominator at hospital Trust level. Activity for the 6 NHS Trusts where patients from Kent & Medway CCGs are admitted are in the highest 2 quintiles of the national data.

The proportion of hospital activity for back pain which is classed as elective care for Kent & Medway is slightly higher than the England proportion. However at NHS Trust level the proportion varies between 72% at King's College to 88% at Medway Trust. All NHS activity at the Independent Sector Providers is classed as elective.



## Hospital Trust activity

### 5. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

#### c. Elective admissions for back and radicular pain, by treatment speciality (Kent & Medway Providers only)

Provider Name	Pain Management & Anaesthetics	Trauma & Orthopaedics	Spinal Surgery Service	Interventional Radiology	Neurosurgery	Other Functions	Total
Guy's & St Thomas'	1,316	1,280	-	-	-	17	2,613
King's College	1,492	<6	-	-	545	34	2,071
Dartford & Gravesham	1,244	8	-	<6	-	7	1,259
Medway	1,089	621	-	-	-	29	1,739
Maidstone & Tunbridge Wells	1,264	76	-	<6	-	10	1,350
East Kent	1,385	2,850	-	-	-	175	4,410
Spencer Wing (Ramsgate Road)	131	44	-	-	-	-	175
BMI - Chaucer Hospital	148	-	-	-	-	-	148
Spire St Saviours Hospital	114	76	-	-	-	-	190
Horder Centre - St Johns Road	252	680	-	-	-	104	1,036
<b>Total</b>	<b>8,435</b>	<b>5,635</b>	<b>-</b>	<b>-</b>	<b>545</b>	<b>376</b>	<b>14,991</b>

#### d. Elective admissions for injections for back and radicular pain, by injection type and treatment speciality (national data)

Treatment Function Title	Other Back Pain Injection	Epidural (not specified)	Epidural Lumbar	Epidural Sacral	Injection Facet Joint	Spinal Nerve Root Injection	Total
Pain Management & Anaesthetics	11,485	1,572	19,926	12,780	46,506	12,482	104,751
Trauma & Orthopaedics	1,286	175	4,190	15,658	10,080	11,518	42,907
Spinal Surgery Service	200	60	590	1,430	2,338	3,571	8,189
Neurosurgery	191	123	1,074	600	1,270	1,303	4,561
Interventional Radiology	14	1	18	3	656	2,961	3,653
Rheumatology	38	12	138	2,428	390	32	3,038
Other Treatment Functions	24	10	81	278	223	591	1,207
<b>Total</b>	<b>13,238</b>	<b>1,953</b>	<b>26,017</b>	<b>33,177</b>	<b>61,463</b>	<b>32,458</b>	<b>168,306</b>

#### What is the data telling us?

For elective activity the treatment speciality code indicated within the hospital data varies by hospital trust. Overall the most common specialties are Trauma and Orthopaedics and Pain Management/Anaesthetics, however for King's College there is <6 admissions to Trauma and Orthopaedics with 545 admissions recorded within Neurosurgery.

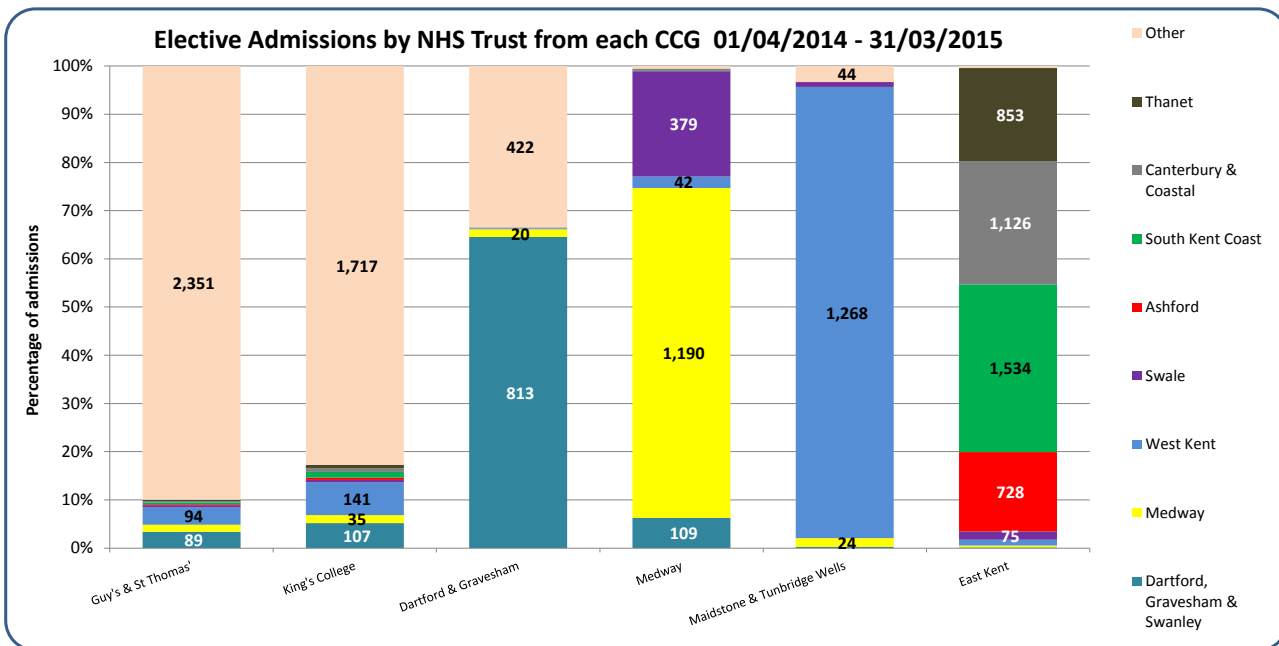
The second table shows the different types of injections being undertaken within each of the treatment function codes and demonstrates that nationally over 62% (104,751) of injections take place within Pain Management/Anaesthetics and 25% of injections are undertaken within Trauma and Orthopaedics.

The most common injection type is facet joint injections, which mainly take place within Pain Management/Anaesthetics treatment function, but are also being used in Trauma and Orthopaedics, Spinal Surgery Service and Neurosurgery.

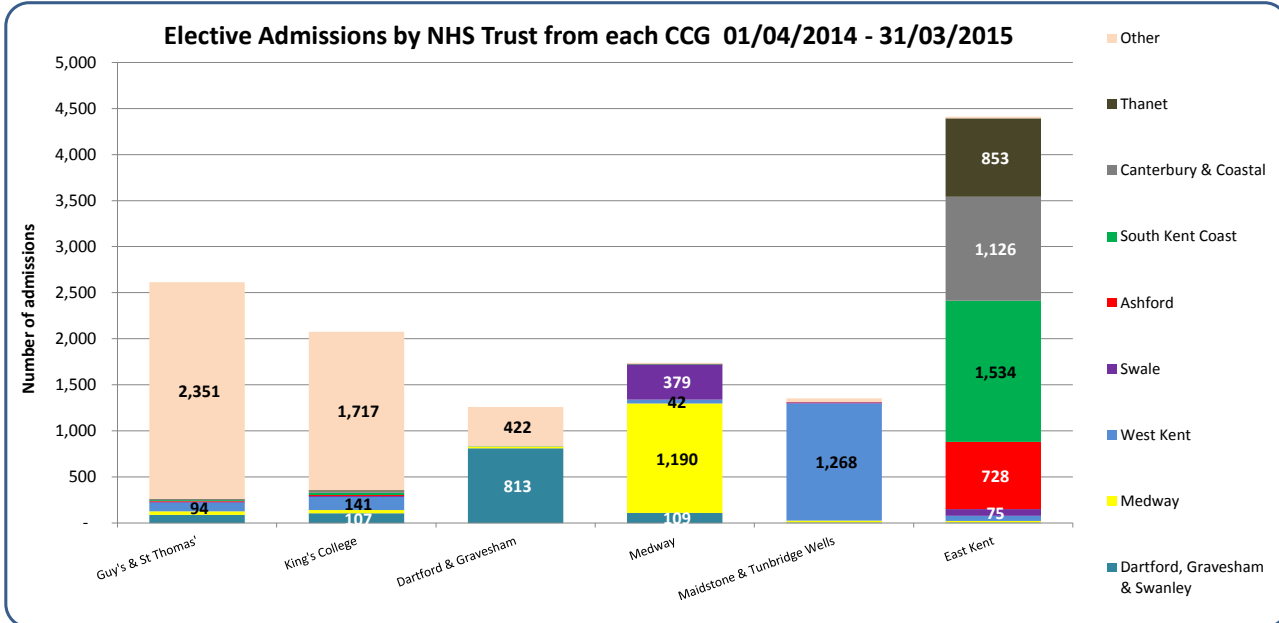
## Hospital Trust activity from CCGs

### 6. Patient flows from CCG to Hospital Trust for back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

#### a. Hospital elective admissions by CCG population (percentage of activity)



#### b. Hospital elective admissions by CCG population (actual activity)



#### What is the data telling us?

There is variation between hospital trusts in terms of the number of patients from each of the CCGs that are admitted for back and radicular pain.

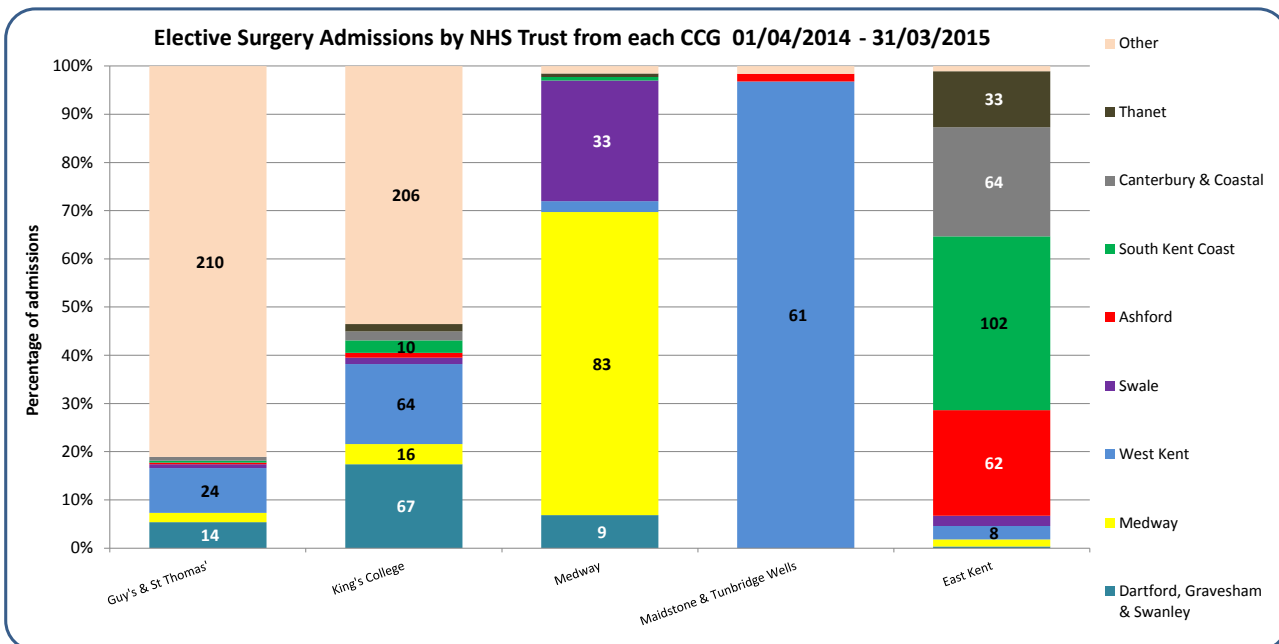
East Kent Trust takes patients from several different CCGs across the region compared to Maidstone & Tunbridge Wells Trust which predominantly admit patients from the CCG where they are located. Guy's and St Thomas and King's College Trusts are located outside of the Kent & Medway CCGs boundary so the majority of their activity comes from CCGs outside of this region.

The data is shown in two ways, indicating both the proportion and number of admissions relating to each CCG.

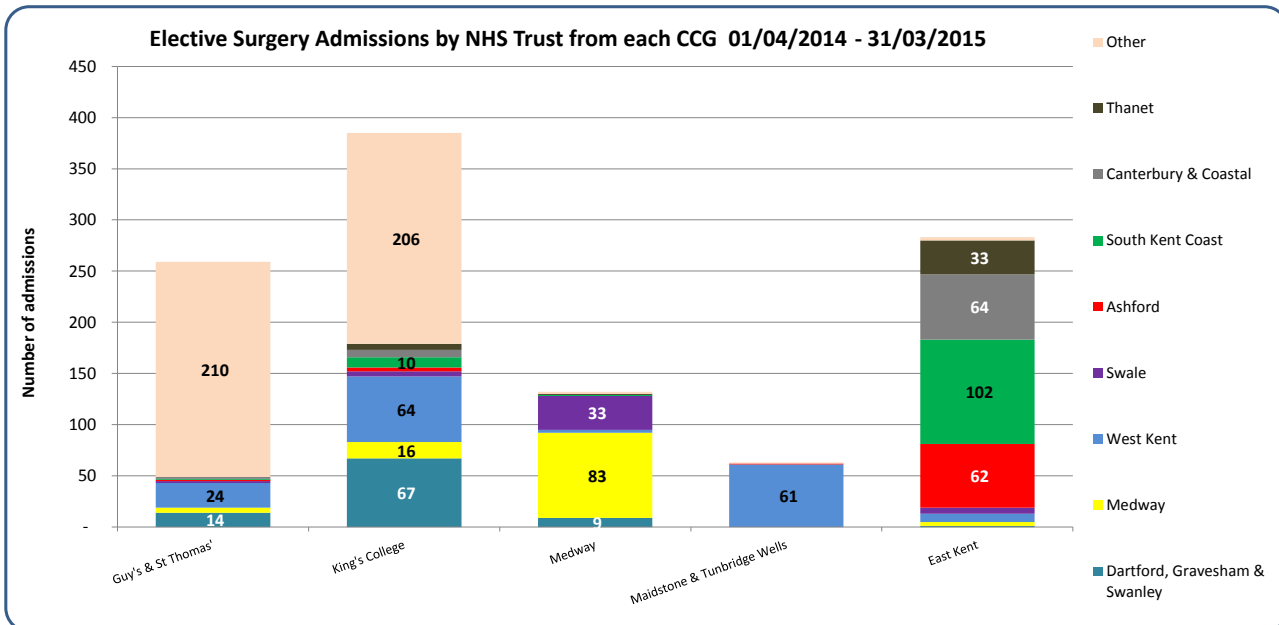
## Hospital Trust activity from CCGs

### 6. Patient flows from CCG to Hospital Trust for back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

#### c. Hospital elective admissions for surgery by CCG population (percentage of activity)



#### d. Hospital elective admissions for surgery by CCG population (actual activity)



#### What is the data telling us?

There is variation between hospital trusts in terms of the number of patients from each of the CCGs that are admitted for spinal surgery for back and radicular pain.

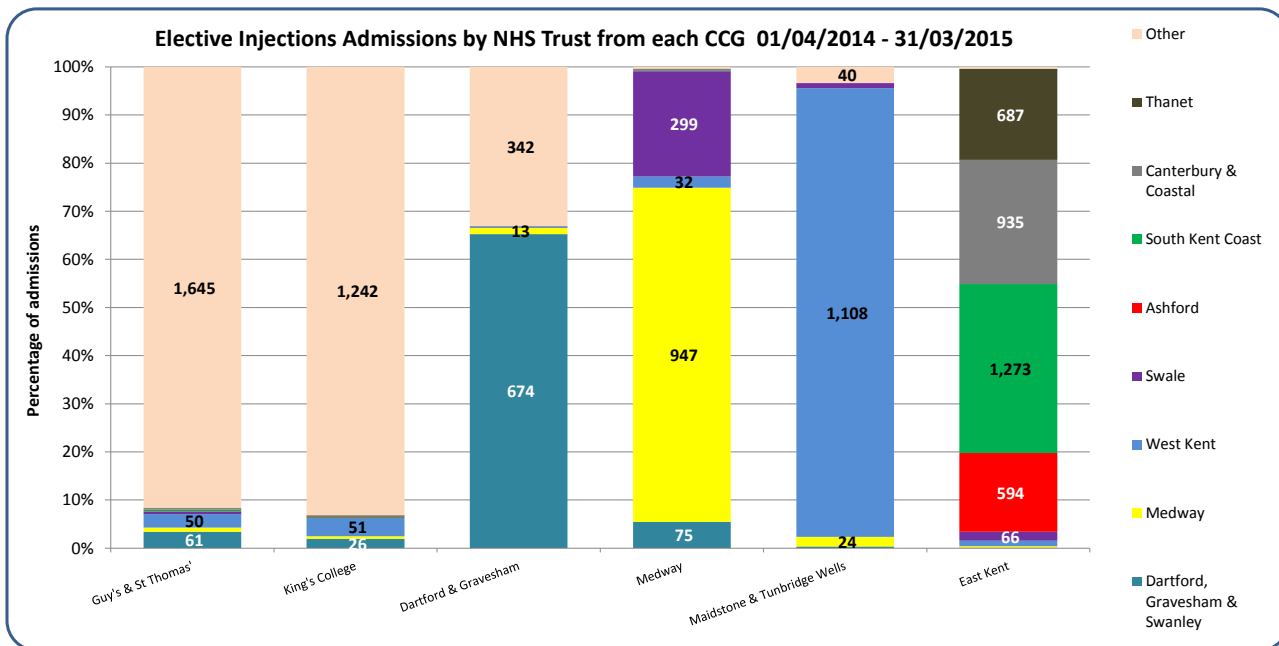
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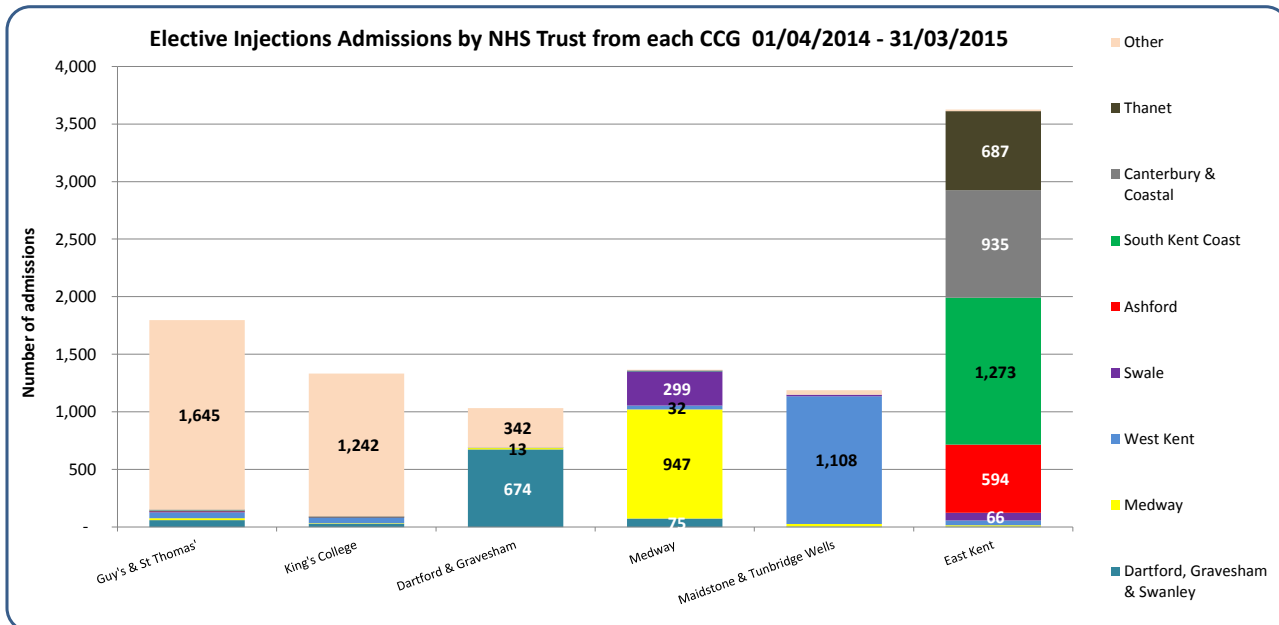
## Hospital Trust activity from CCGs

### 6. Patient flows from CCG to Hospital Trust for back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

#### e. Hospital elective admissions for injections by CCG population (percentage of activity)



#### f. Hospital elective admissions for injections by CCG population (actual activity)



#### What is the data telling us?

There is variation between hospital trusts in terms of the number of patients from each of the CCGs that are admitted for injections for back and radicular pain.

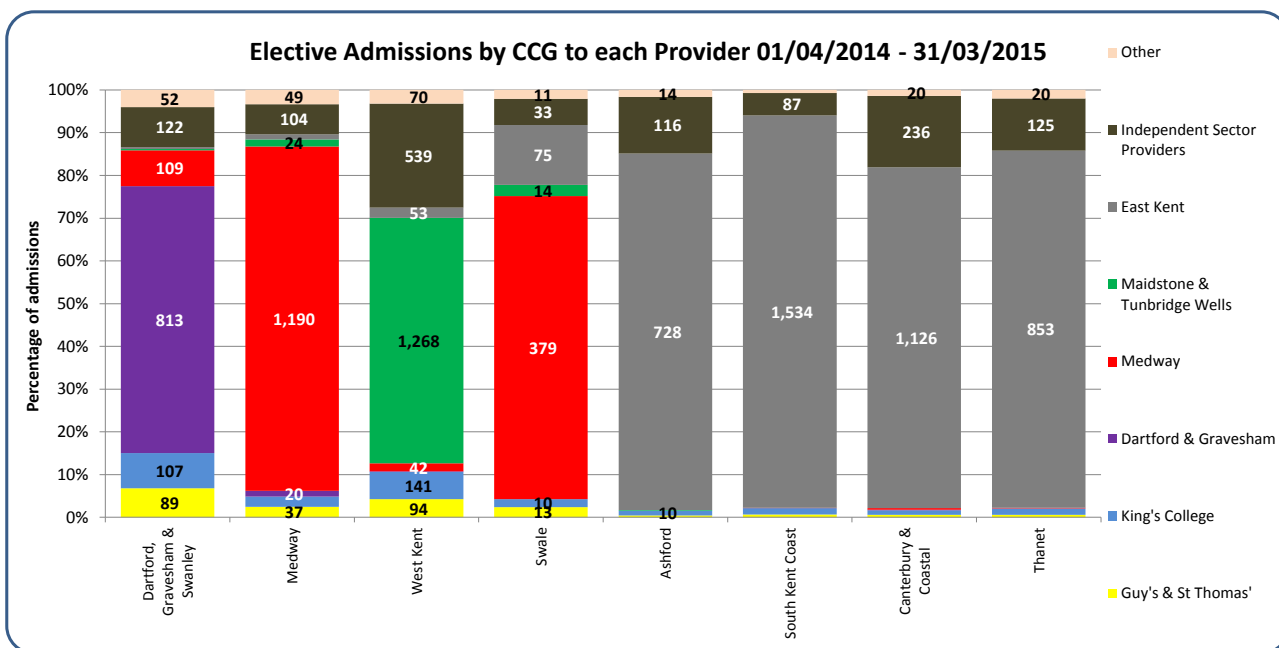
East Kent Trust has the highest activity for injections and take patients from several different CCGs across the region compared to Maidstone & Tunbridge Wells Trust which predominantly admit patients from the CCG where they are located. Guy's and St Thomas and King's College Trusts are located outside of the Kent & Medway CCGs boundary so the majority of their activity comes from CCGs outside of this region with relatively few admissions for Kent & Medway CCGs.

The data is shown in two ways, indicating both the proportion and number of admissions relating to each CCG.

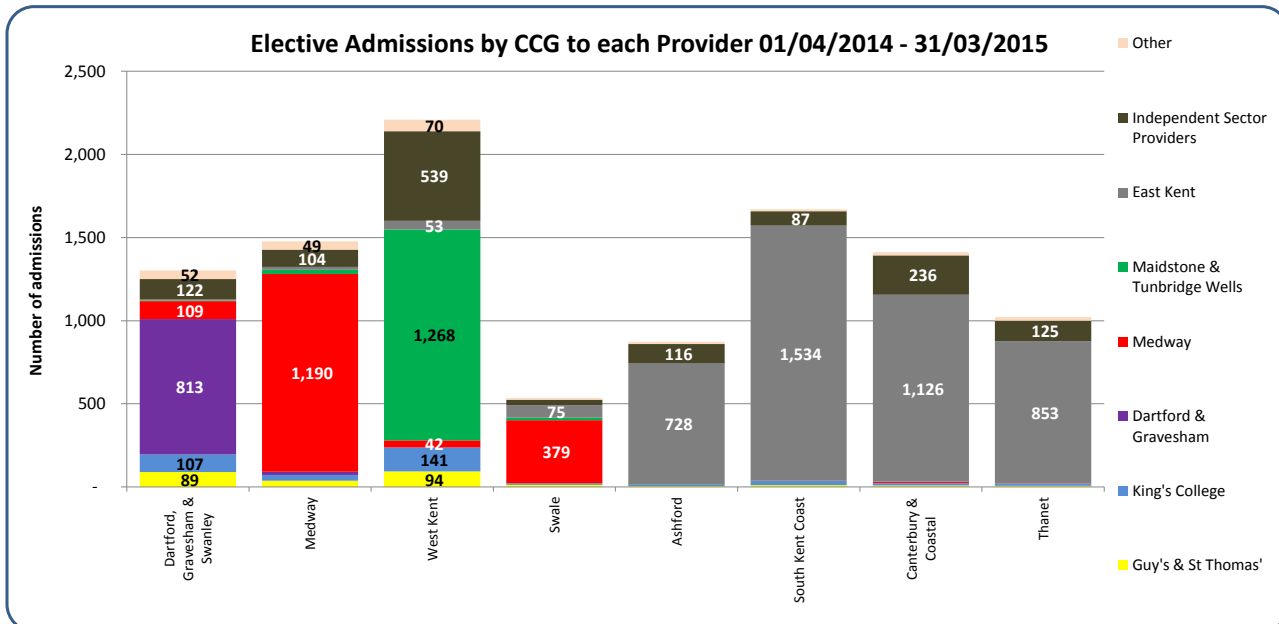
## CCG activity to Hospital Trust

### 7. Patient flows to Hospital Trusts from CCGs for back pain in people aged 16 years and over (April 2014 - March 2015)

#### a. Hospital elective admissions by CCG population (percentage of activity)



#### b. Hospital elective admissions from each CCG (actual activity)



#### What is the data telling us?

There is variation between CCGs in terms of the number of hospital trusts to which their patients are admitted.

Activity is highest for West Kent CCG where patients were admitted to at least five NHS Trusts and was the highest user of Independent Sector Providers (539 admissions).

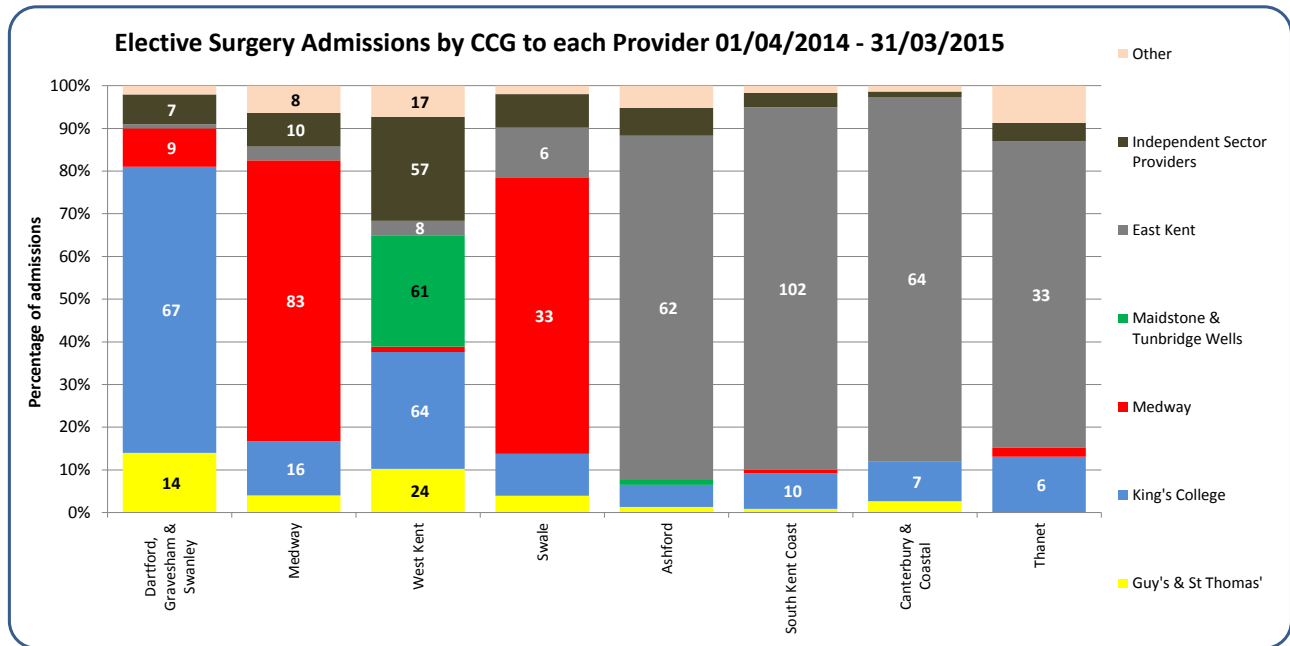
The 4 CCGs located in the east of the region mainly used East Kent Trust and Independent Sector Providers.

The data is shown in two ways, indicating both the proportion and amount of activity relating to each hospital trust.

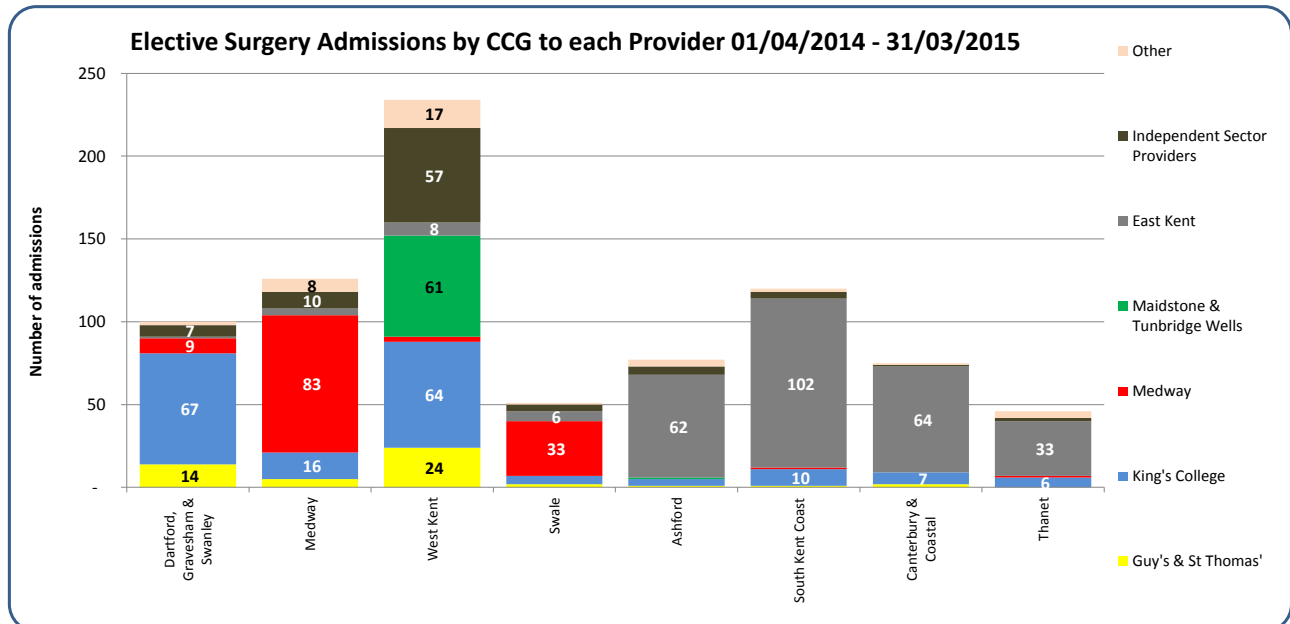
## CCG activity to Hospital Trust

### 7. Patient flows to Hospital Trusts from CCGs for back pain in people aged 16 years and over (April 2014 - March 2015)

#### c. Hospital elective admissions for surgery by CCG population (percentage of activity)



#### d. Hospital elective admissions for surgery from each CCG (actual activity)



#### What is the data telling us?

There is variation between CCGs in terms of the number of hospital trusts to which their patients are admitted for spinal surgery.

Activity is highest for West Kent CCG where patients were admitted to at least five NHS Trusts and was the highest user of Independent Sector Providers (57 admissions).

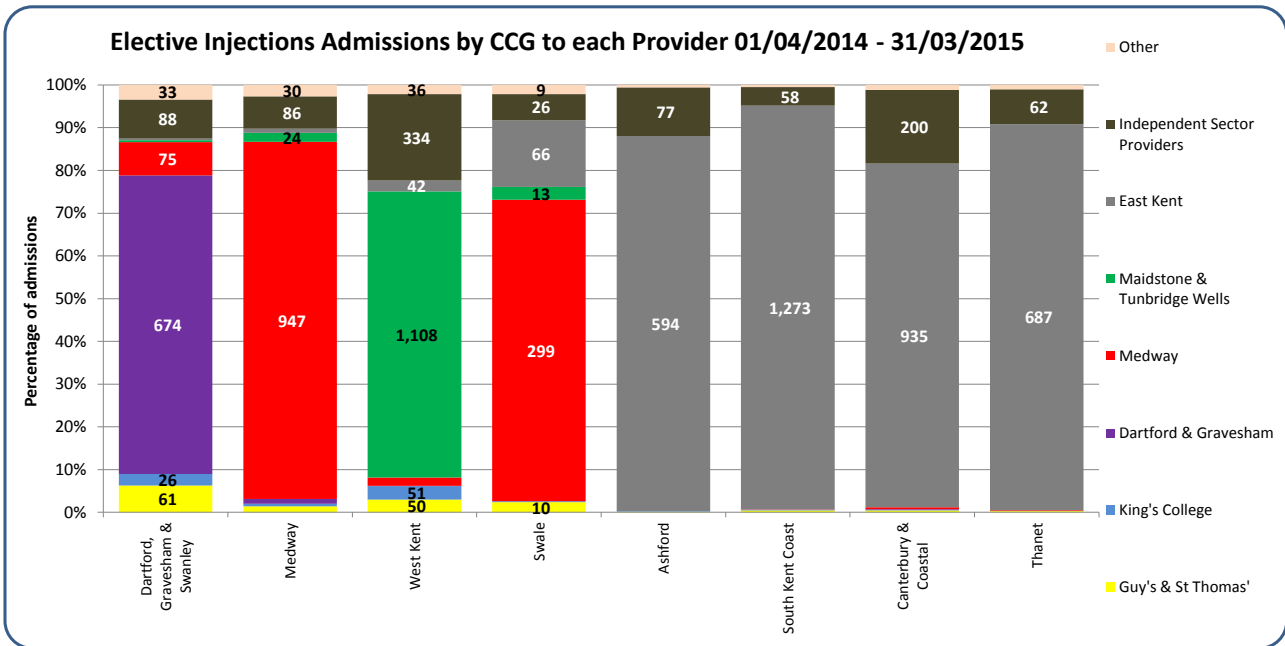
The 4 CCGs located in the east of the region mainly used East Kent Trust and King's College.

The data is shown in two ways, indicating both the proportion and amount of activity relating to each hospital trust.

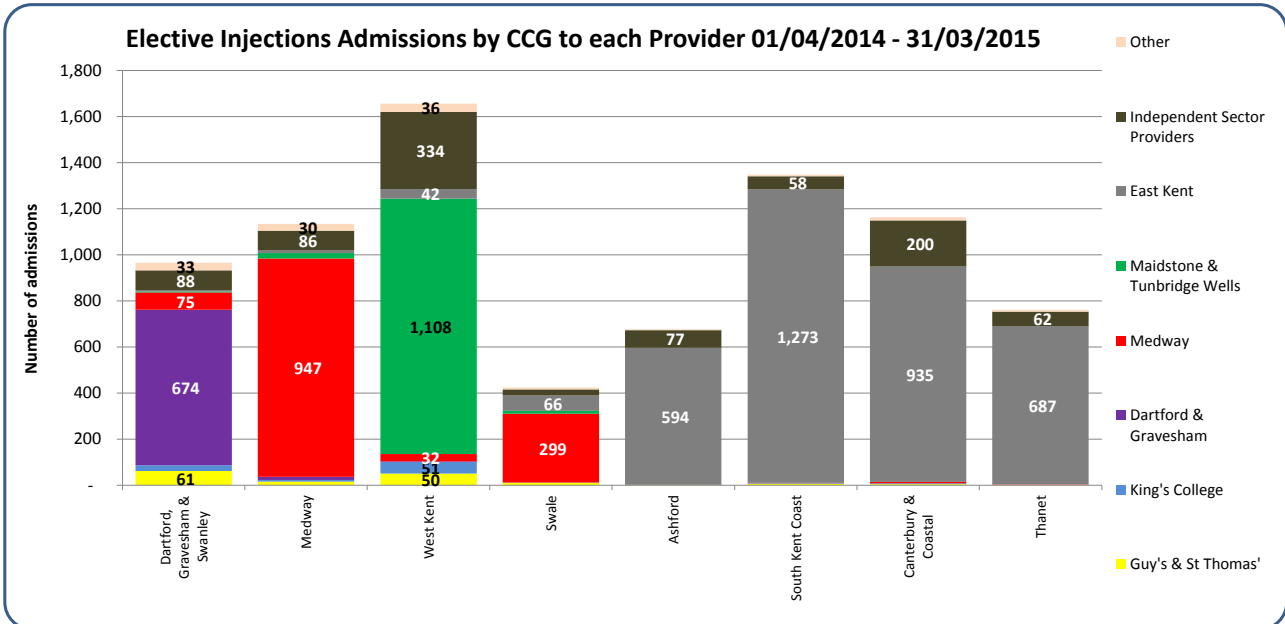
**CCG activity to Hospital Trust**

**7. Patient flows to Hospital Trusts from CCGs for back pain in people aged 16 years and over (April 2014 - March 2015)**

**e. Hospital elective admissions for injections by CCG population (percentage of activity)**



**f. Hospital elective admissions for injections from each CCG (actual activity)**



**What is the data telling us?**

There is variation between CCGs in terms of the number of hospital trusts to which their patients are admitted for injections.

Activity is highest for West Kent CCG where patients were mainly admitted to Maidstone & Tunbridge Wells Trust and there was high use of Independent Sector Providers (334 admissions).

The 4 CCGs located in the east of the region mainly used East Kent Trust and Independent Sector Providers.

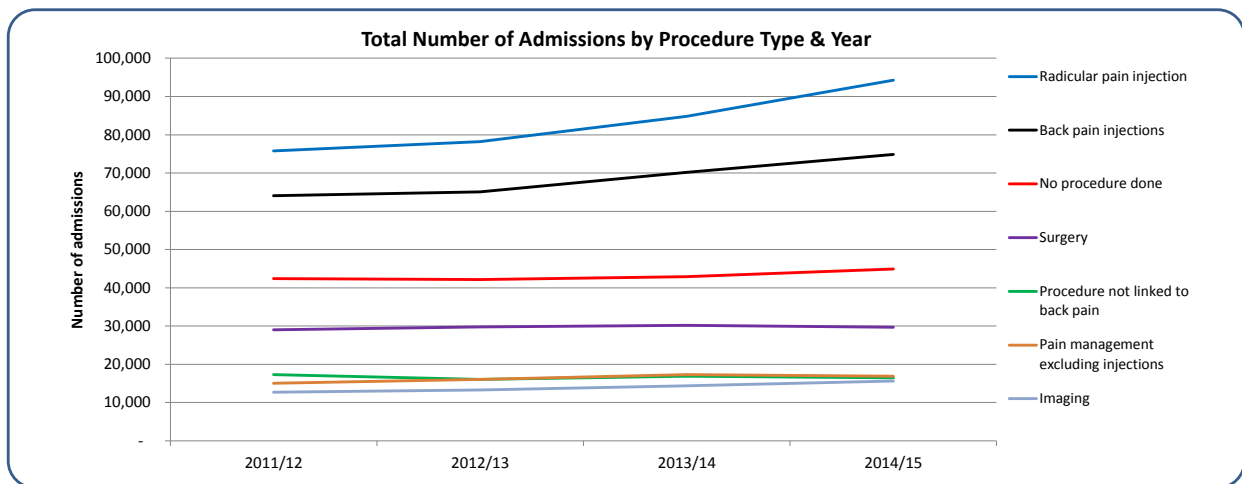
The data is shown in two ways, indicating both the proportion and amount of activity relating to each hospital trust.



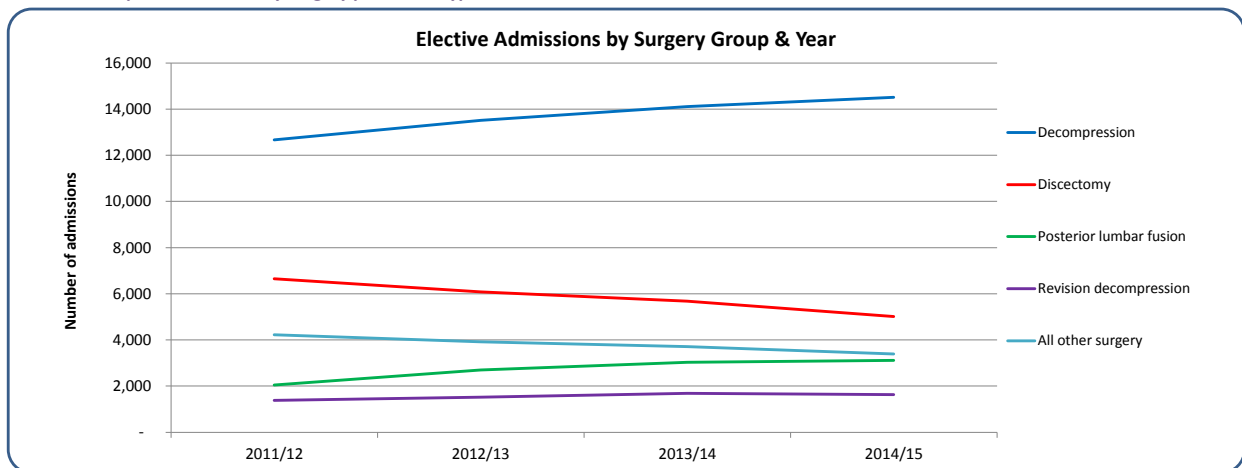
## Hospital Trust activity (national level)

### 8. Hospital admissions for low back and radicular pain in people aged 16 years and over (1st April 2011 - 31st March 2015)

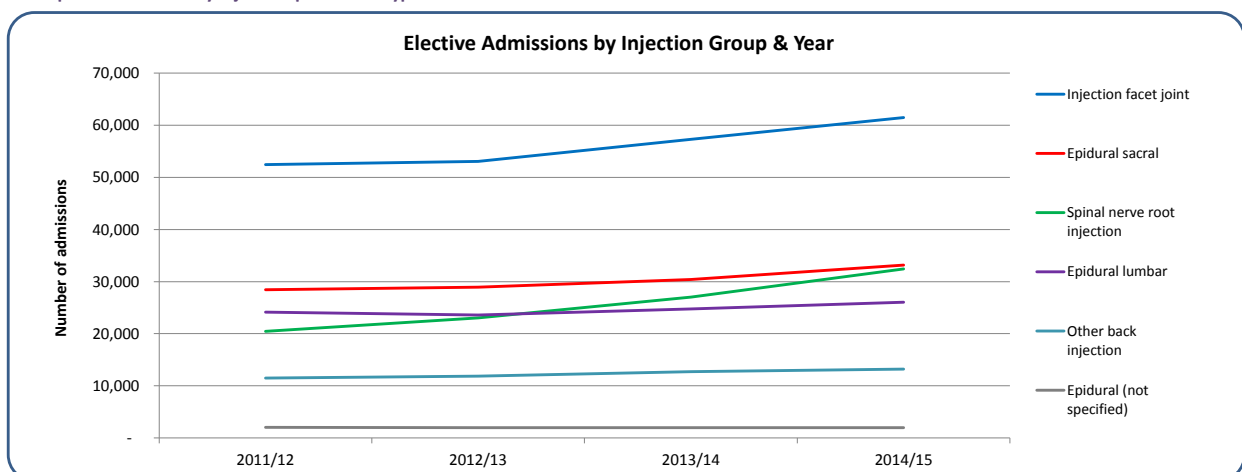
#### a. Hospital admissions by procedure type over time (all admission types)



#### b. Elective hospital admissions by surgery procedure type over time



#### c. Hospital admissions by injection procedure type over time



#### What is the data telling us?

These charts show national trends in the types of procedures undertaken during elective admissions including a group where no procedure was undertaken during their admission. There is also a category listed as 'procedure not linked to back pain' which reports admission activity where there is a primary diagnosis of back pain but with a procedure not linked to back pain.

The main procedure type relating to elective admissions are for back and radicular pain injections which has increased from a combined total of just under 140,000 to 170,000 episodes over the four year period. This is in stark contrast to number of admissions related to surgery which has remained relatively constant at 30,000 admissions per year. The proportion of admissions with no procedure reported has remained at approximately 15-16% of all activity.

The charts in sections b and c show the elective admissions over time specifically for different groups of surgery procedures and injections.

## Hospital Trust activity

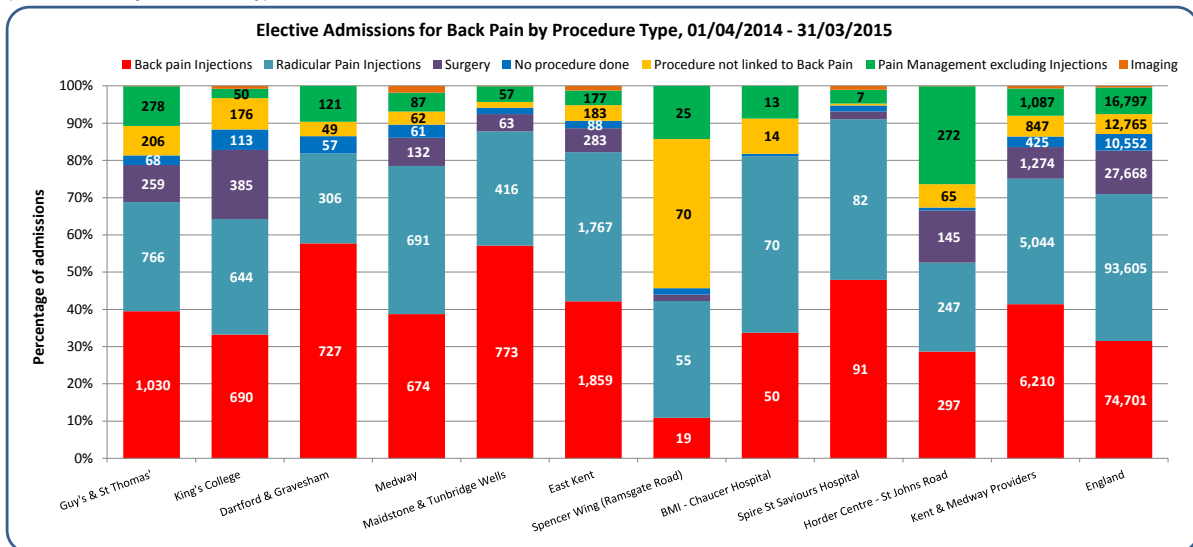
### 9. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

#### a. Elective hospital admissions by procedure type (national level including all providers)

Procedure type	Back	Radicular	Total	%
Radicular Pain Injections	40,034	53,571	93,605	39.5%
Back Pain Injections	62,317	12,384	74,701	31.5%
Surgery	3,925	23,743	27,668	11.7%
Pain Management excluding Injections	13,150	3,647	16,797	7.1%
Procedure not linked to Back Pain	8,197	4,568	12,765	5.4%
No procedure done	6,060	4,492	10,552	4.4%
Imaging	712	373	1,085	0.5%
Other Non-Surgical	53	30	83	0.0%
<b>Total</b>	<b>134,448</b>	<b>102,808</b>	<b>237,256</b>	<b>100%</b>

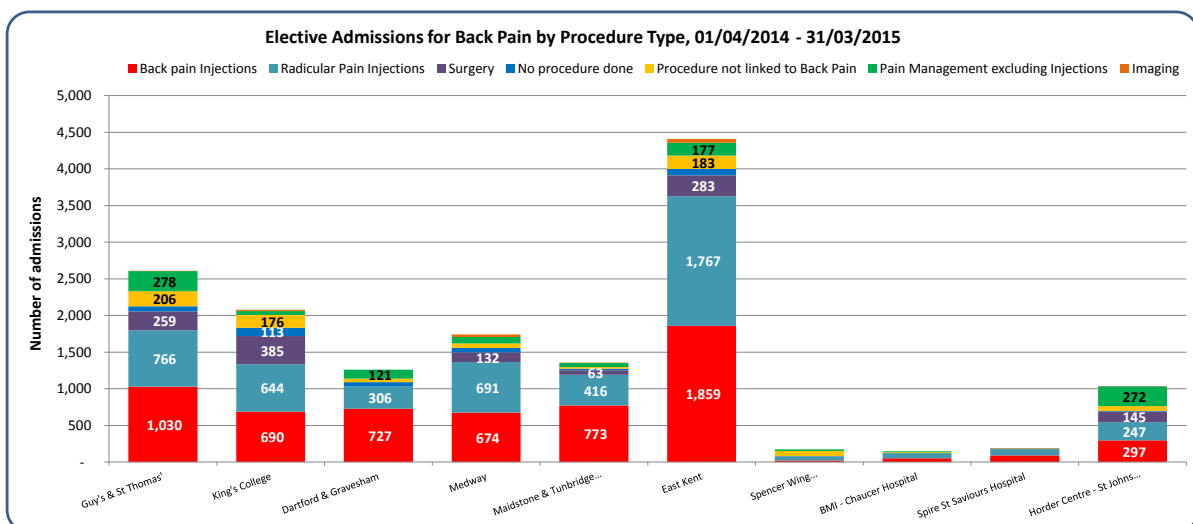
#### b. Number of elective admissions per hospital Trust, by procedure type (percentage of activity)

(Kent & Medway Providers only)



#### c. Number of elective admissions per hospital Trust, by procedure type (actual activity)

(Kent & Medway Providers only)



#### What is the data telling us?

The table shows the number of procedures done in the latest 12 month period, by procedure type, with injections being the most common elective procedure. Nationally only 4.4% of elective admissions have no procedure recorded indicating that there are relatively few elective admissions where no procedure is undertaken (compared to 15-16% of all admission types - see previous sheet).

East Kent Trust has notably higher admissions which are driven by the high activity for injections. All 4 NHS Trusts located within the Kent & Medway CCGs have a higher proportion of elective activity for injections than the England rate (approx. 70%) and it is possible that the variation may be even greater due to differences in the point of delivery of care across hospital Trusts (for example it is possible that activity may also take place as outpatient procedures). This contrasts with Guy's & St Thomas and King's College Trusts where the proportion of admissions for injections are lower than England.

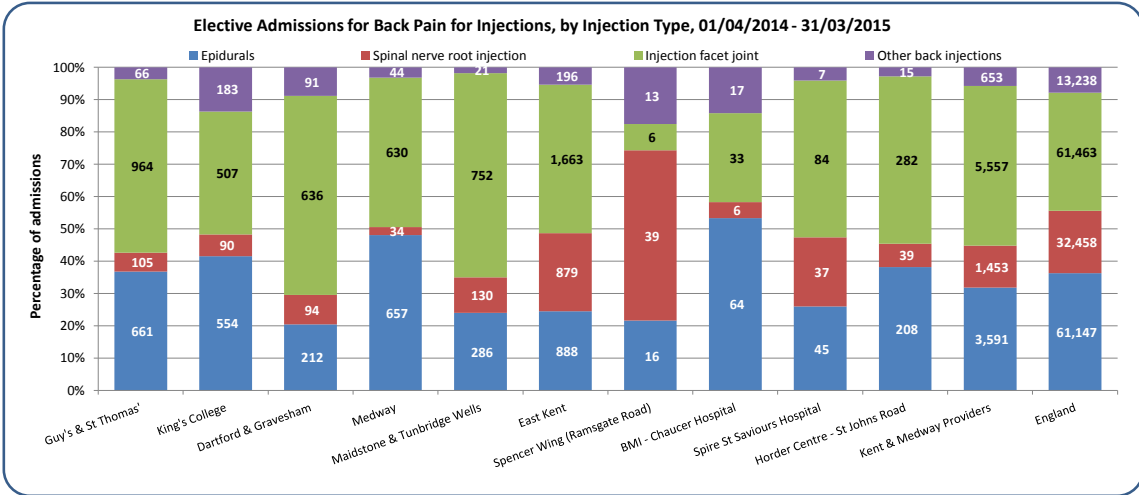
The data is shown in two ways, indicating both the proportion and amount of activity relating to each procedure.

**Hospital Trust activity**

**9. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)**

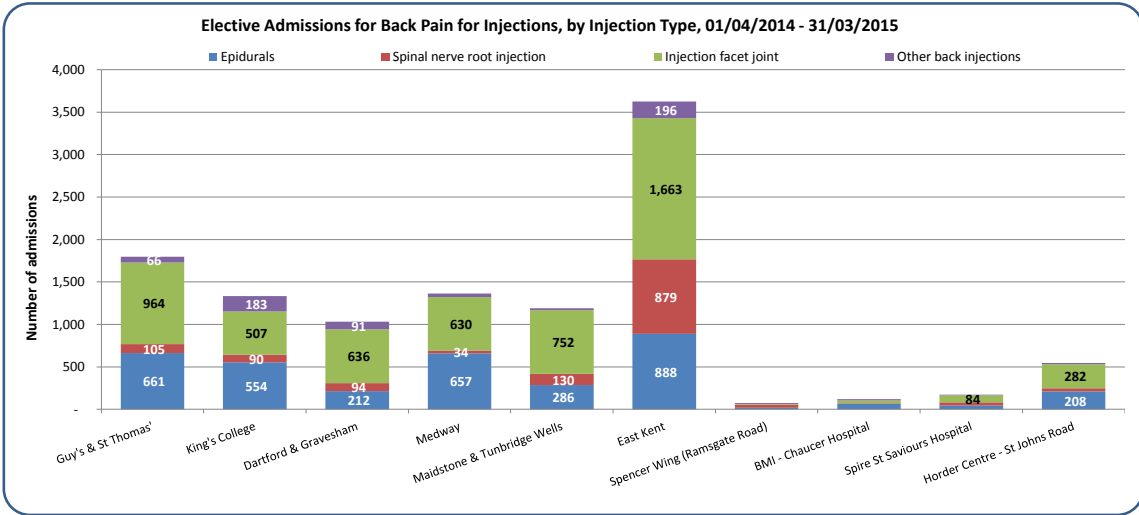
**d. Number of elective admissions for injections per hospital Trust, by injection type (percentage of activity)**

*(Kent & Medway Providers only)*

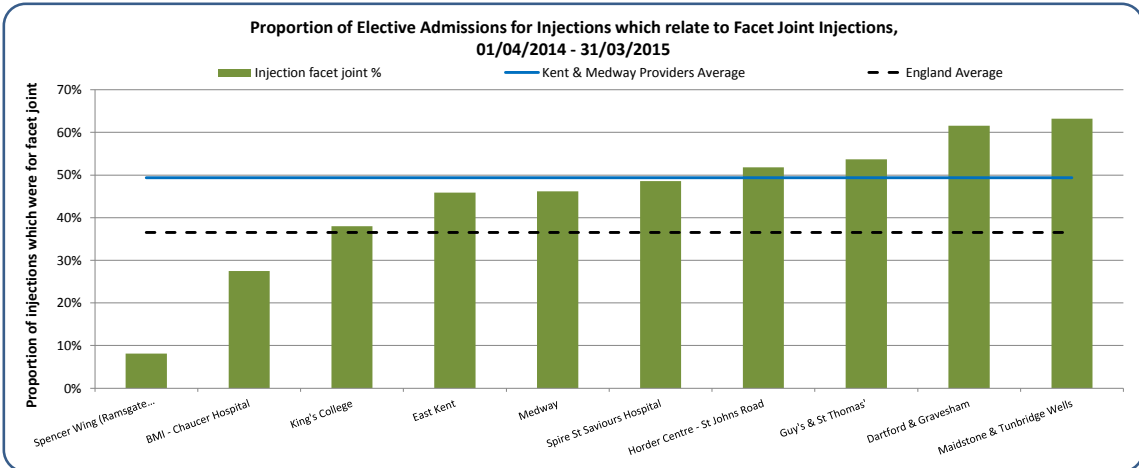


**e. Number of elective admissions for injections per hospital Trust, by injection type (actual activity)**

*(Kent & Medway Providers only)*



**f. Proportion of elective admissions for lumbar facet joint injections, by hospital trust**



**What is the data telling us?**

Facet joint injections are those most frequently done by providers used by Kent & Medway CCGs, constituting almost 50% of injection activity which is higher than the England proportion of 37%. Kent & Medway providers overall do lower proportion of spinal nerve root injections and epidurals compared to England. East Kent Trust has notably higher admissions for injections doing at least twice as many as the other providers. The data is shown in two ways, indicating both the proportion of overall activity and number of episodes for each provider.

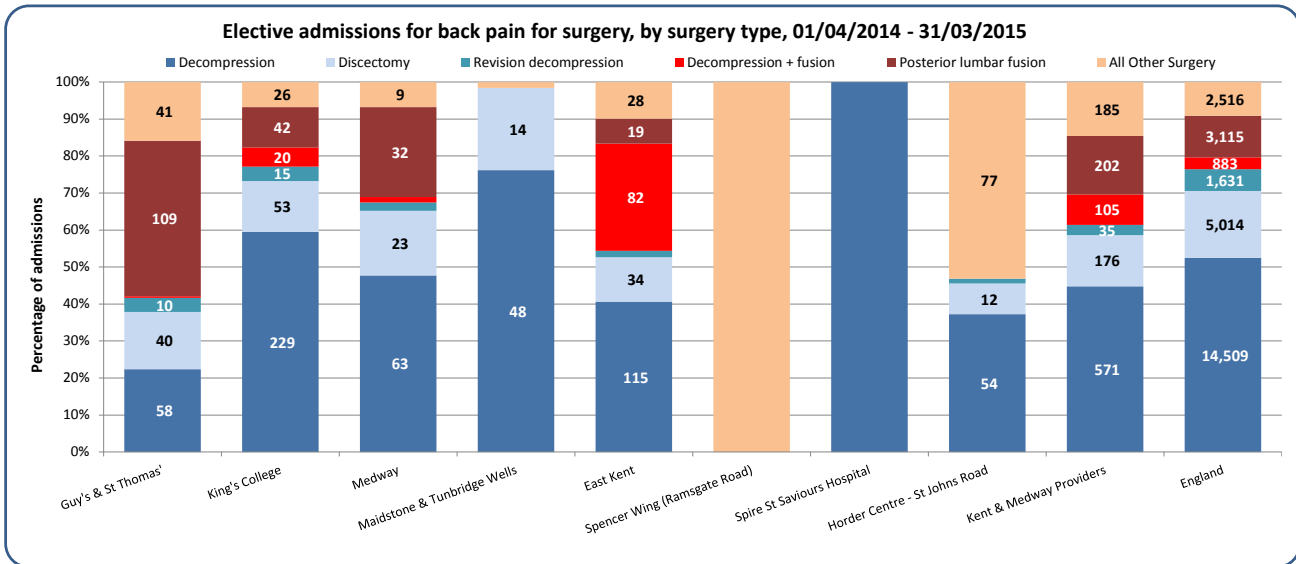
The proportion of facet joint injections done at an NHS Trust level ranges from 38% (King's College) to 63% (Maidstone & Tunbridge Wells) compared to the England figure of 37%.

## Hospital Trust activity

### 9. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

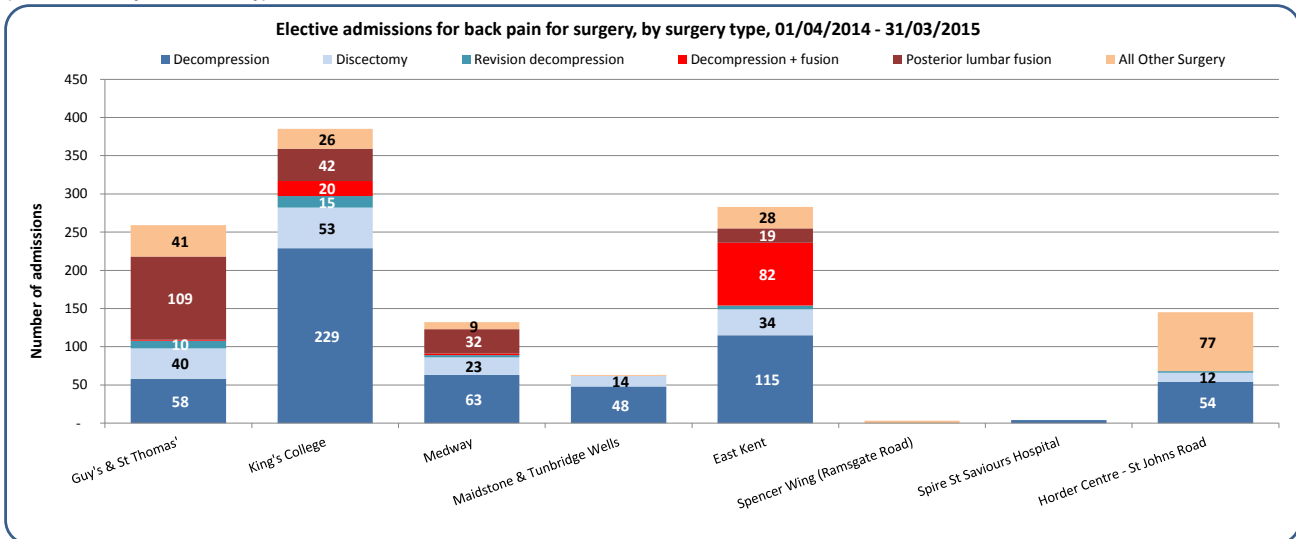
#### g. Number of elective admissions for surgery per hospital Trust, by surgery type (percentage of activity)

(Kent & Medway Providers only)



#### h. Number of elective admissions for surgery per hospital Trust, by surgery type (actual activity)

(Kent & Medway Providers only)



#### What is the data telling us?

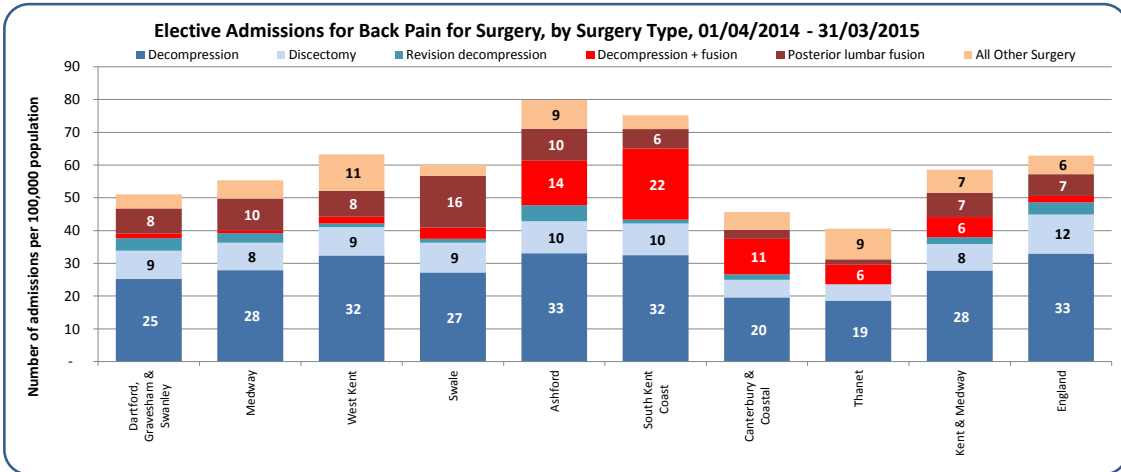
The charts above show the range in activity relating specifically to elective admissions for surgery, by type of surgery, for the Kent & Medway Providers. These providers overall do a higher proportion of fusions and lower proportion of decompressions and discectomies compared to the England profile. There are variations at Trust level between the 3 highest volume providers with higher proportion of fusions at Guy's & St Thomas' and East Kent Trusts compared to King's College Trust which looks similar to the England profile.

The data is shown in two ways, indicating both the proportion and amount of activity relating to each surgery type.

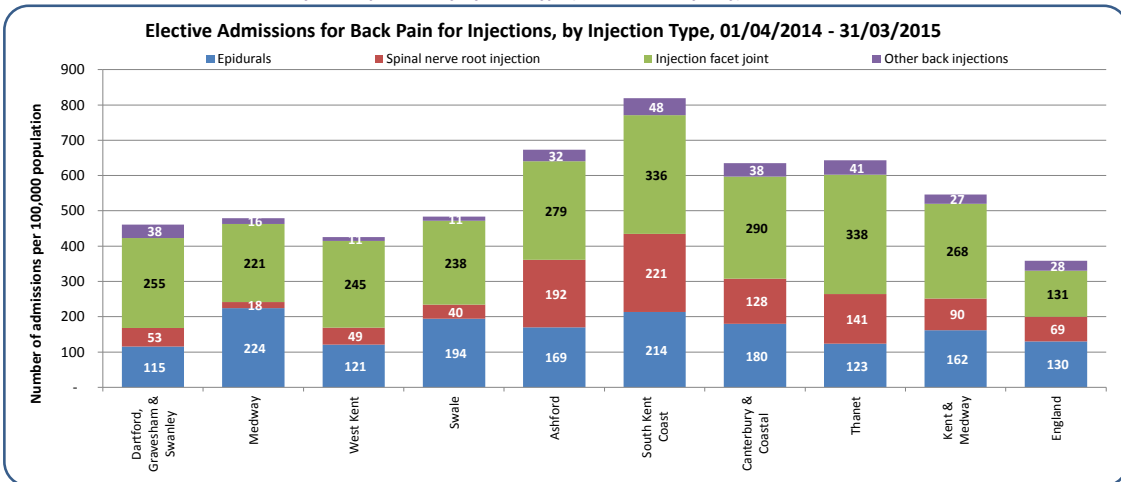
CCG activity by back pain procedure group

10. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

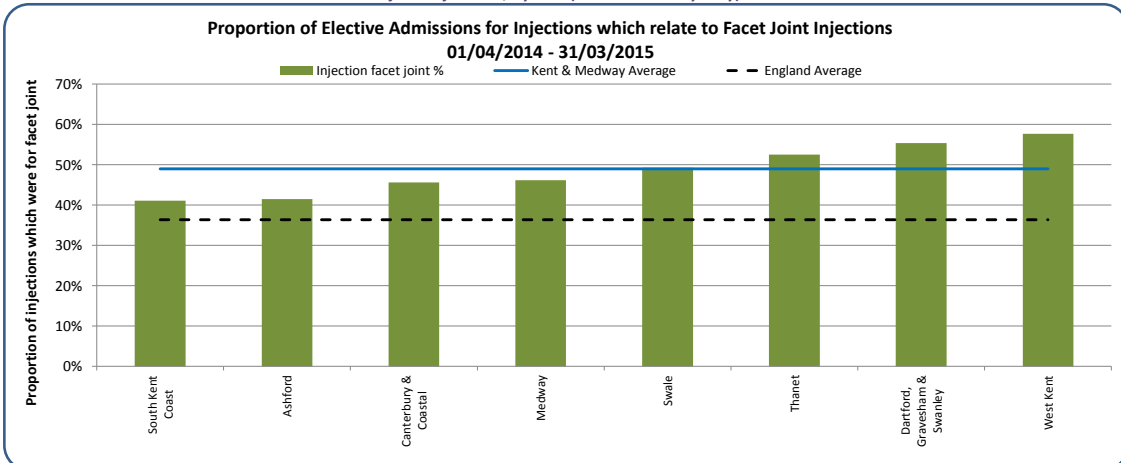
a. Number of elective admissions for surgery per CCG, by surgery type (Kent & Medway only)



b. Number of elective admissions for injections per CCG, by injection type (Kent & Medway only)



c. Number of elective admissions for lumbar facet joint injections, by CCG (Kent & Medway only)



What is the data telling us?

Chart 9a shows the range in the activity rate relating specifically to elective admissions for surgery, by type of surgery, for Kent & Medway CCGs, with chart 9b showing the same for injections.

Overall, this region has lower rates per 100,000 for surgery but there is variation between the CCGs with Ashford and South Kent Coast having higher rates of surgery (particularly fusions) compared to the other CCGs, regional and national rates.

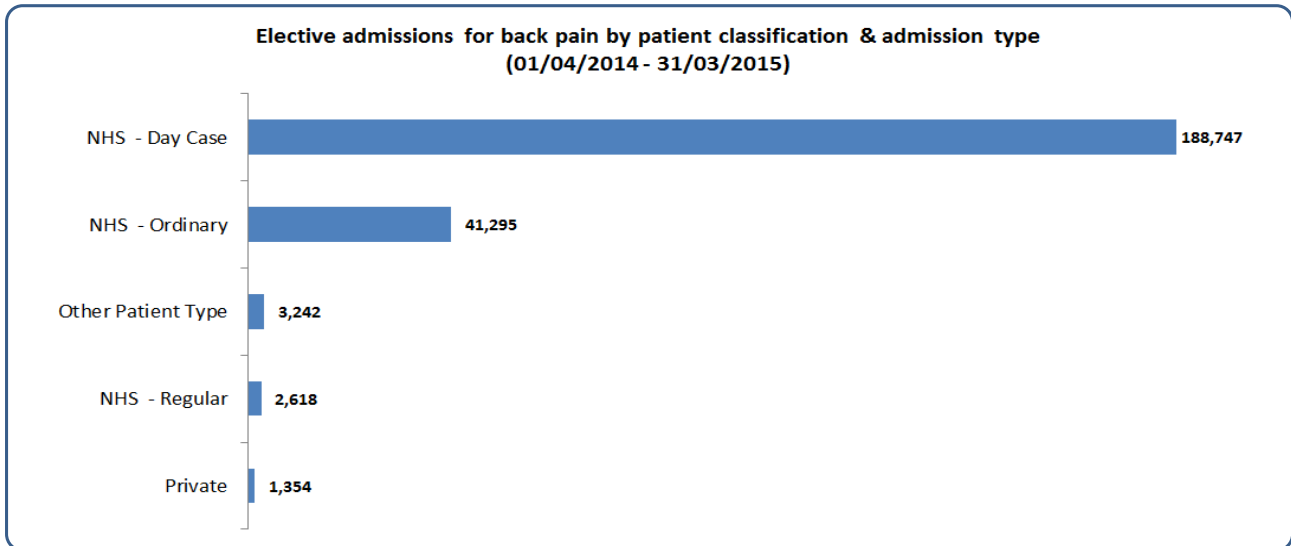
In contrast, this region has higher rates per 100,000 for injections with all CCGs higher than the national rate but there is variation between the CCGs with Ashford having higher rates of injections (819 per 100,000) compared to the other CCGs in the region and is over twice the national rate (358 per 100,00).

The proportion of facet joint injections done at CCG level ranges from 41% (South Kent Coast) to 58% (West Kent) compared to the England figure of 37%.

## Hospital Trust activity

### 11. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

#### a. Elective admissions for back pain by patient classification and type, all providers



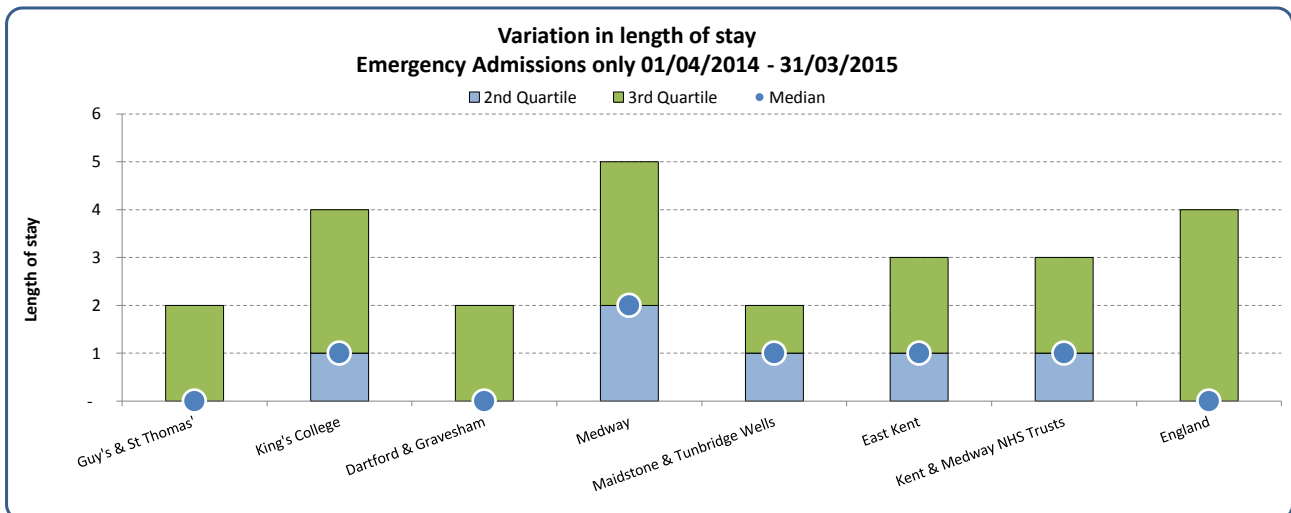
Other Patient Types are Amenity patients and Category II patients, and where the Administrative Category is unknown.

#### b. Elective admissions for back pain, average length of stay by provider

67% of elective admissions for back pain are day cases, therefore the range in length of stay has not been calculated.

#### c. Emergency admissions for back pain, average length of stay by provider

(Kent & Medway Trusts only)



#### What is the data telling us?

Over 98% of elective admissions for back pain in the current data extraction relate to NHS patients, with just over 0.5% relating to private patients.

The boxplot indicates the variation in length of stay for emergency admissions to the provider Trusts that Kent & Medway CCGs use and shows that 5 of the 7 Trusts have a median length of stay of 1 or 2 days, compared to the England average of zero days.

## Hospital Trust Activity Total Costs

### 12. Total costs to the commissioner for hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

#### a. Total Costs by Admission Method Type (Kent & Medway FTs only)

Provider Name	Elective	Emergency	Other	Total
Guy's & St Thomas <sup>1</sup>	£ 4,701,423	£ 449,541	£ 1,382	£ 5,152,346
King's College	£ 3,408,518	£ 1,194,895	£ 244,401	£ 4,847,814
East Kent	£ 3,803,056	£ 917,597	£ 23,266	£ 4,743,920
Medway	£ 1,777,361	£ 356,004	£ 3,512	£ 2,136,877
Maidstone & Tunbridge Wells	£ 1,114,714	£ 383,467	£ 26,570	£ 1,524,751
Dartford & Gravesham	£ 831,382	£ 423,480	£ 20,582	£ 1,275,444
<b>Total</b>	<b>£ 15,636,455</b>	<b>£ 3,724,984</b>	<b>£ 319,713</b>	<b>£ 19,681,151</b>

#### b. Total Costs by Procedure Type (Kent & Medway FTs only)

Provider Name	Surgery	Radicular pain Injections	Back pain Injections	No procedure done	Procedure not linked to back pain	Imaging	Pain Management excluding Injections	Other Non-Surgical	Total
Guy's & St Thomas <sup>1</sup>	£ 2,257,185	£ 639,495	£ 735,147	£ 218,804	£ 616,690	£ 137,178	£ 545,170	£ 2,678	£ 5,152,346
King's College	£ 2,231,446	£ 499,722	£ 552,298	£ 542,460	£ 620,704	£ 361,396	£ 39,788	£ -	£ 4,847,814
East Kent	£ 1,266,195	£ 1,200,882	£ 1,096,382	£ 378,908	£ 214,661	£ 416,558	£ 169,601	£ 731	£ 4,743,920
Medway	£ 715,342	£ 485,736	£ 441,354	£ 150,258	£ 117,219	£ 170,452	£ 56,516	£ -	£ 2,136,877
Maidstone & Tunbridge Wells	£ 266,090	£ 286,614	£ 513,071	£ 229,650	£ 49,364	£ 149,106	£ 30,546	£ 311	£ 1,524,751
Dartford & Gravesham	£ -	£ 213,198	£ 512,982	£ 264,150	£ 108,739	£ 100,826	£ 75,550	£ -	£ 1,275,444
<b>Total</b>	<b>£ 6,736,258</b>	<b>£ 3,325,646</b>	<b>£ 3,851,234</b>	<b>£ 1,784,230</b>	<b>£ 1,727,377</b>	<b>£ 1,335,516</b>	<b>£ 917,171</b>	<b>£ 3,719</b>	<b>£ 19,681,151</b>

#### What is the data telling us?

Across all provider Trusts that Kent & Medway CCGs used in 2014/15 the total cost to commissioners for back and radicular pain admissions was approximately £19.7 million, with 80% of the costs attributed to elective activity. Note that these costs are by provider Trust and will include activity for CCGs outside of the Kent & Medway region.

The surgery procedures group accounts for almost 34% of the total cost of all procedures, and the cost of injections is an additional 37% of the total.



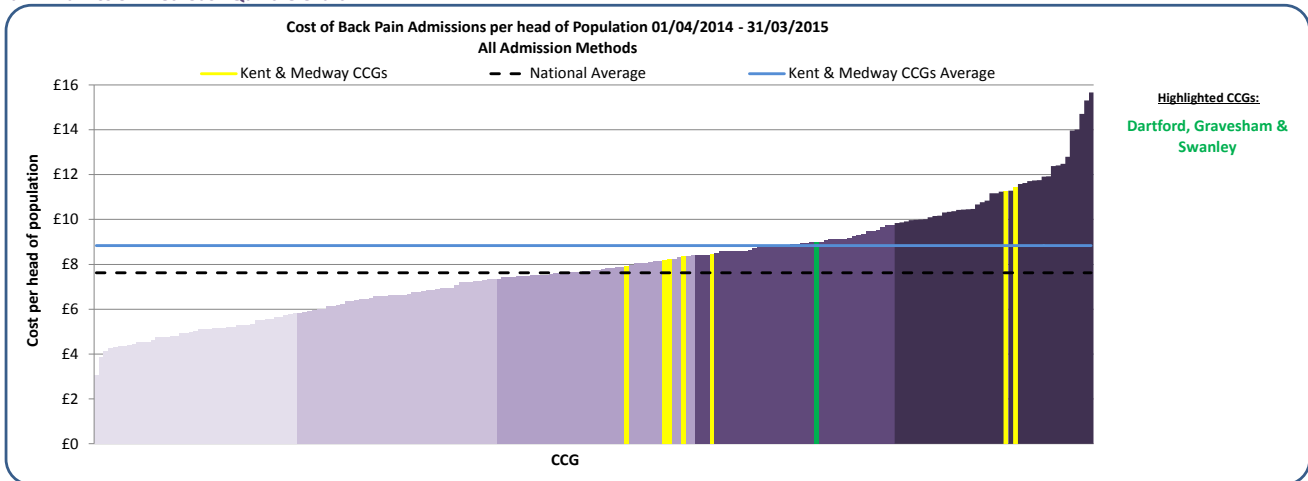
## CCG Activity Total Costs

### 13. Hospital admissions Total Cost for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

#### a. All Admission Methods - Table

Responsible CCG Name	All Admissions		Elective Admissions		Emergency Admissions		Registered Population (Ages 15+)
	Cost per head of Population	Total Cost	Cost per head of Population	Total Cost	Cost per head of Population	Total Cost	
West Kent	£ 7.92	£ 3,080,239	£ 6.63	£ 2,578,195	£ 1.11	£ 431,424	389,103
Thanet	£ 8.15	£ 965,033	£ 6.86	£ 811,884	£ 1.24	£ 146,806	118,345
Canterbury & Coastal	£ 8.22	£ 1,511,735	£ 6.48	£ 1,191,899	£ 1.71	£ 314,147	183,955
Medway	£ 8.36	£ 1,980,573	£ 7.11	£ 1,685,090	£ 1.23	£ 291,971	236,875
Swale	£ 8.43	£ 742,306	£ 7.26	£ 639,125	£ 1.12	£ 98,810	88,083
Dartford, Gravesham & Swanley	£ 8.97	£ 1,879,148	£ 6.75	£ 1,414,960	£ 1.96	£ 411,332	209,549
South Kent Coast	£ 11.24	£ 1,868,101	£ 9.35	£ 1,553,676	£ 1.82	£ 302,388	166,188
Ashford	£ 11.45	£ 1,176,425	£ 9.27	£ 952,312	£ 1.98	£ 203,190	102,701
<b>Kent &amp; Medway Total</b>	<b>£ 8.83</b>	<b>£ 13,203,560</b>	<b>£ 7.24</b>	<b>£ 10,827,142</b>	<b>£ 1.47</b>	<b>£ 2,200,067</b>	<b>1,494,799</b>

#### b. All Admission Methods - Quintile Chart



#### c. Elective Admissions only, by Procedure Type

Responsible CCG Name	Surgery	Radicular pain Injections	Back pain Injections	No procedure done	Procedure not linked to back pain	Imaging	Pain Management excluding Injections	Other Non-Surgical	Total Cost
West Kent	£ 1,133,449	£ 453,183	£ 648,255	£ 3,051	£ 163,930	£ 23,898	£ 151,420	£ 1,010	£ 2,578,195
Medway	£ 662,108	£ 403,651	£ 365,167	£ 12,361	£ 131,535	£ 19,031	£ 91,238	£ -	£ 1,685,090
South Kent Coast	£ 525,613	£ 450,341	£ 378,351	£ 14,332	£ 128,182	£ 10,651	£ 46,205	£ -	£ 1,553,676
Dartford, Gravesham & Swanley	£ 549,157	£ 245,837	£ 421,967	£ 5,095	£ 77,087	£ 5,461	£ 108,957	£ 1,398	£ 1,414,960
Canterbury & Coastal	£ 335,118	£ 371,853	£ 356,062	£ 4,052	£ 55,112	£ 13,881	£ 55,820	£ -	£ 1,191,899
Ashford	£ 369,515	£ 227,237	£ 188,681	£ 4,384	£ 101,335	£ 12,482	£ 47,948	£ 731	£ 952,312
Thanet	£ 182,091	£ 194,130	£ 265,811	£ 8,333	£ 71,711	£ 4,385	£ 85,423	£ -	£ 811,884
Swale	£ 269,412	£ 137,974	£ 141,707	£ 751	£ 65,038	£ 7,335	£ 16,909	£ -	£ 639,125

#### What is the data telling us?

There is wide variation across the CCGs in Kent & Medway in cost per head of population for admissions related to back and radicular pain.

Ashford CCG has the highest spend per head of population regionally (£11.45) driven mainly by high costs for elective admissions. West Kent CCG has the lowest costs per head for both emergency and elective admissions (£7.92) in the region.

The final table shows the total spend for elective admissions for each CCG for 2014/15 (based on national tariff) and includes a breakdown of this spend by procedure type. Surgery generally accounts for the majority of spend, but most of the CCGs in the Kent and Medway region are spending more on admissions for injections compared to what is being spent on surgery.

#### 14. Back & Radicular Pain Admissions Breakdown for the Kent & Medway Region

Highlighted Provider Data is included in this report  
(Blue=NHS Trust & Green=Independent Sector Provider)

Code	Provider Name	Elective Admissions			Emergency Admissions	Other Admission Types	Total
		Surgery	Injections	Other			
RVV	EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST	280	3,612	501	776	<6	5,172
RPA	MEDWAY NHS FOUNDATION TRUST	130	1,360	240	231	<6	1,964
RWF	MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST	62	1,149	100	343	<6	1,659
RN7	DARTFORD AND GRAVESHAM NHS TRUST	-	691	147	312	6	1,156
RJZ	KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	179	92	87	64	20	442
NXM01	THE HORDER CENTRE - ST JOHNS ROAD	53	176	115	-	-	344
RJ1	GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	49	151	62	8	-	270
NT346	SPIRE ST SAVIOURS HOSPITAL	<6	173	13	-	-	190
NN801	THE SPENCER WING (RAMSGATE ROAD)	<6	74	96	-	-	173
NT408	BMI - THE CHAUCER HOSPITAL	-	120	28	-	-	148
NT239	NUFFIELD HEALTH, TUNBRIDGE WELLS HOSPITAL	<6	77	41	-	-	122
NT414	BMI - FAWKHAM MANOR HOSPITAL	-	71	20	-	-	91
NT438	BMI - THE SOMERFIELD HOSPITAL	-	79	<6	-	-	83
RRV	UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	11	43	25	<6	<6	82
NWF01	BENENDEN HOSPITAL	-	64	<6	-	-	66
NT312	SPIRE ALEXANDRA HOSPITAL	9	50	<6	-	-	60
RAN	ROYAL NATIONAL ORTHOPAEDIC HOSPITAL NHS TRUST	7	27	17	-	-	51
RJ2	LEWISHAM AND GREENWICH NHS TRUST	-	20	<6	<6	-	27
R1H	BARTS HEALTH NHS TRUST	<6	13	<6	<6	-	25
NT409	BMI - CHELSFIELD PARK HOSPITAL	6	7	9	-	-	22
RYY	KENT COMMUNITY HEALTH NHS TRUST	-	-	<6	<6	13	21
NT422	BMI - THE LONDON INDEPENDENT HOSPITAL	-	14	6	-	-	20
RXH	BRIGHTON AND SUSSEX UNIVERSITY HOSPITALS NHS TRUST	<6	<6	6	<6	<6	17
NT406	BMI - THE BLACKHEATH HOSPITAL	<6	8	<6	-	-	17
RXC	EAST SUSSEX HEALTHCARE NHS TRUST	7	<6	-	<6	-	15
RVR	EPSOM AND ST HELIER UNIVERSITY HOSPITALS NHS TRUST	-	<6	<6	<6	-	9
RJY	IMPERIAL COLLEGE HEALTHCARE NHS TRUST	<6	<6	<6	<6	-	7
NVC11	NORTH DOWNS HOSPITAL	-	7	-	-	-	7
RDD	BASILDON AND THURROCK UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	-	<6	<6	-	-	6
RA2	ROYAL SURREY COUNTY HOSPITAL NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
NT436	BMI - SHIRLEY OAKS HOSPITAL	<6	-	<6	-	-	<6
RTP	SURREY AND SUSSEX HEALTHCARE NHS TRUST	-	<6	-	<6	-	<6
RDU	FRIMLEY HEALTH NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RF4	BARKING, HAVERING AND REDBRIDGE UNIVERSITY HOSPITALS NHS TRUST	-	-	<6	<6	-	<6
RJ7	ST GEORGE'S UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
RP4	GREAT ORMOND STREET HOSPITAL FOR CHILDREN NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RTE	GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
NT309	SPIRE SUSSEX HOSPITAL	<6	<6	-	-	-	<6
NT418	BMI - THE HAMPSHIRE CLINIC	-	<6	-	-	-	<6
RJ6	CROYDON HEALTH SERVICES NHS TRUST	-	<6	-	<6	-	<6
RM3	SALFORD ROYAL NHS FOUNDATION TRUST	<6	-	-	<6	-	<6
RPY	THE ROYAL MARSDEN NHS FOUNDATION TRUST	-	<6	<6	-	-	<6
RQM	CHELSEA AND WESTMINSTER HOSPITAL NHS FOUNDATION TRUST	-	-	<6	<6	-	<6
NT421	BMI - THE KINGS OAK HOSPITAL	-	<6	-	-	-	<6
NVC01	ASHTEAD HOSPITAL	-	<6	-	-	-	<6
RA9	SOUTH DEVON HEALTHCARE NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RAJ	SOUTHEND UNIVERSITY HOSPITAL NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RDZ	THE ROYAL BOURNEMOUTH AND CHRISTCHURCH HOSPITALS NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RFS	CHESTERFIELD ROYAL HOSPITAL NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RGQ	IPSWICH HOSPITAL NHS TRUST	<6	-	-	-	-	<6
RHM	UNIVERSITY HOSPITAL SOUTHAMPTON NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RHU	PORTSMOUTH HOSPITALS NHS TRUST	-	-	-	<6	-	<6
RN5	HAMPSHIRE HOSPITALS NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RQW	THE PRINCESS ALEXANDRA HOSPITAL NHS TRUST	-	<6	-	-	-	<6
RTH	OXFORD UNIVERSITY HOSPITALS NHS TRUST	-	-	-	<6	-	<6
RTK	ASHFORD AND ST PETER'S HOSPITALS NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RWG	WEST HERTFORDSHIRE HOSPITALS NHS TRUST	-	<6	-	-	-	<6
RX1	NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST	-	-	-	<6	-	<6
NT313	SPIRE WELLESLEY HOSPITAL	-	<6	-	-	-	<6
NT314	SPIRE RODING HOSPITAL	-	<6	-	-	-	<6
NT325	SPIRE MURRAYFIELD HOSPITAL	-	<6	-	-	-	<6
NT437	BMI - THE SLOANE HOSPITAL	<6	-	-	-	-	<6
<b>Total</b>		<b>829</b>	<b>8,127</b>	<b>1,546</b>	<b>1,776</b>	<b>52</b>	<b>12,330</b>

DOCUMENT GOVERNANCE	
Document name	Back Pain Report
Document type	Final
Version	0.6
Date	24/06/2016
Document Classification	Confidential
Prepared on behalf of	GIRFT
Created by	Adam Fearing, Andrea Brown & Liz Lingard
Approved by Epidemiologist	Liz Lingard
Approved by Project Director	Helen Ridley
Peer Reviewed by (if appropriate)	
Originating organisation	NEQOS
Website of originating organisation	www.neqos.nhs.uk - Please contact the NEQOS advisory service through this web link for further information or to enquire about NEQOS undertaking similar work.
Contact email address	<a href="mailto:neqos@nhs.net">neqos@nhs.net</a>
Public file location	N/A
Internal file location	G:\Project Management\Project Mgt 15-16\Back Pain

VERSION CONTROL				
Version	Document Type	Date	Amendments	By
0.1	First Draft	10/03/2016	---	Adam Fearing, Liz Lingard
0.2	Draft V2	15/03/2016	Amendments & Final QA	Adam Fearing, Kayoung Goffe
0.3	Draft V3	15/04/2016	Further minor amendments	Adam Fearing, Kayoung Goffe
0.4	Draft V4	03/05/2016	Further minor amendments	Adam Fearing
0.5	Draft V5	11/05/2016	Further minor amendments	Adam Fearing
0.6	Draft V6	24/06/2016	Narrative & formatting	Liz Lingard

CONFIDENTIALITY CHECKLIST – FOR COMPLETION PRIOR TO ANY DRAFTS SENT TO CLIENTS	
Does the report include any small numbers?	Yes
If yes, can we produce a meaningful suppressed version?	Yes, the small numbers in this report have been suppressed. Observed events less than 6 have been replaced by "<6". Rates where the numerator or denominator are less than 6 have been shown, although to calculate that small number would not be possible from the data shown here.
If not, the Epidemiologist AND Director must justify why not here, highlight, and agree the need for an NDA	
Have Lightfoot/HSCIC approved use of NDA in order to disclose small numbers?	
Has the recipient of the report signed the NDA?	